SANYO

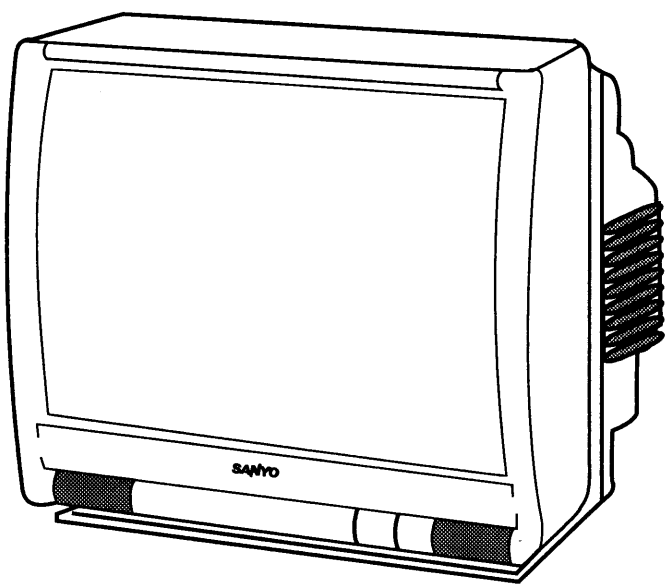
Colour Television Service Manual C25EG85NB

Model C25EG85NB

Service Ref. No. C25EG85NB-00 (THOMSON CRT)

PRODUCT CODE
111317813

ORIGINAL VERSION
Chassis No. EB2-A



Give complete "SERVICE REF. NO." for parts order or servicing, it is shown on the rating sheet on the cabinet back of the TV set.

Note
This TV receiver will not work properly in foreign countries where the television transmission system and power source differ from the design specifications. Refer to the specifications for the design specifications

SPECIFICATIONS

Power source	AC 220~240V 50Hz
Television system	System I
Colour system	PAL
Receiving channel	UHF 21~69
Aerial input impedance	75ohm
AV terminal	
21 Pin socket	CENELEC standard
Sound output	10 watts X2 (music)
Picture tube	63cm diagonal, 90 degree
(Visible picture diagonal)	59cm
Dimensions (WxHxD)	568 x 516 x 437 mm
Weight	25.8 Kg

CONTENTS

	Page
Safety Precautions	2
Block Diagram	3
Circuit Diagram	4-5
Service Control Adjustment	6-7
Circuit Alignment	8
SIF Alignment	9
Memory IC Replacement	10
Cabinet Parts List C25EG85NB	11
Service position	12
Chassis Electrical Parts List	13
Schematic Diagram	(inserted)

PART NO. SKSM0127

MC-Service

SAFETY PRECAUTION

1: An isolation transformer should be connected in the power line between the receiver and the AC line when a service is performed on the primary of the converter transformer of the set.
2: Comply with all caution and safety-related notes provided on the cabinet back, inside the cabinet, on the chassis or the picture tube.
3: When replacing a chassis in the cabinet, always be certain that all the protective devices are installed properly, such as, control knobs, adjustment covers or shields, barriers, isolation resistor-capacitor networks etc.

Before returning any television to the customer, the service technician must be sure that it is completely safe to operate without danger of electrical shock.

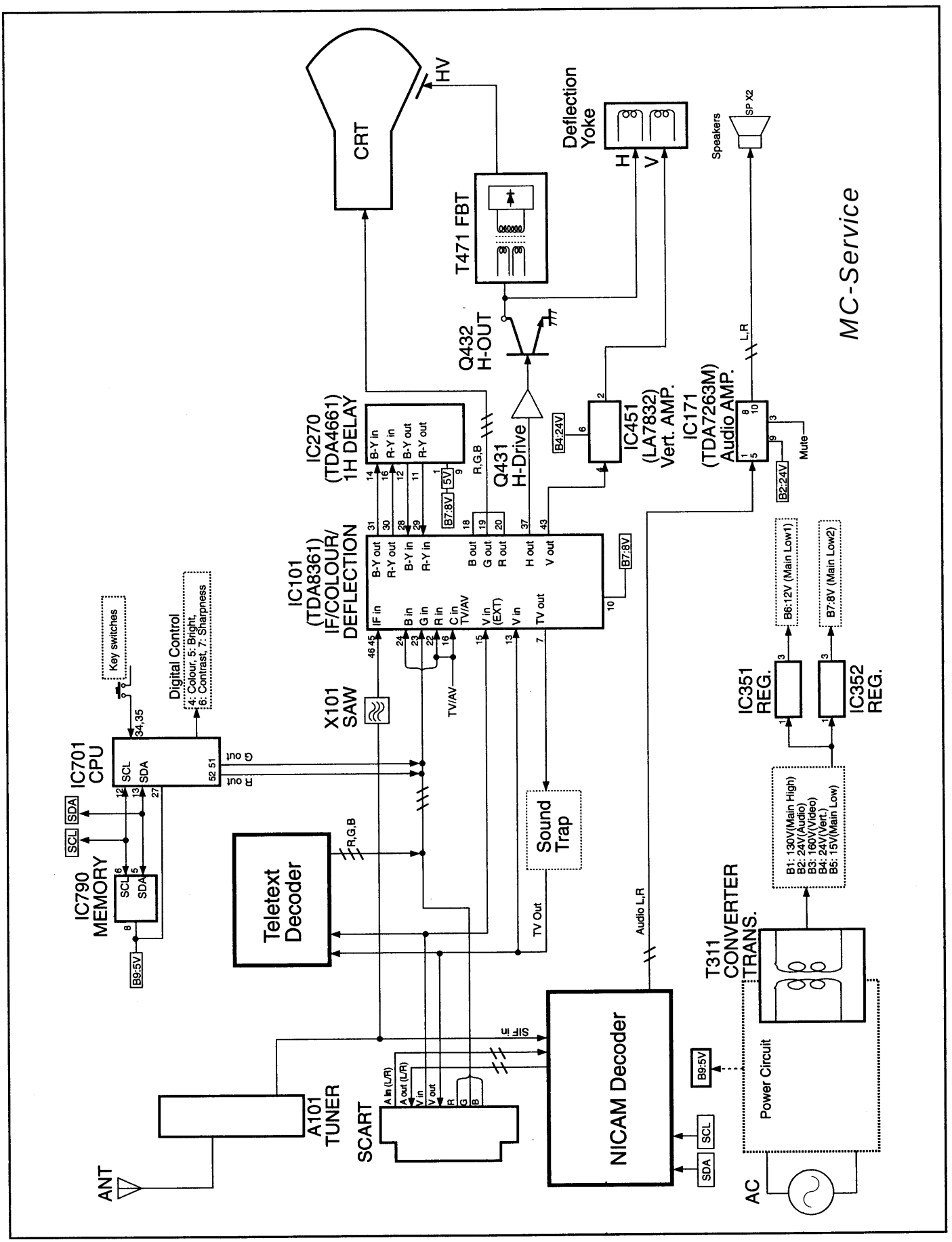
The primary source of X-RADIATION in the television receiver is the picture tube. The picture tube is specially constructed to limit X-RADIATION emissions. For continued X-RADIATION protection, the replacement tube must be the same type as the original including suffix letter. Excessive high voltage may produce potentially hazardous X-RADIATION. To avoid such hazards, the high voltage must be maintained within specified limit. Refer to this service manual, high voltage adjustment for specific high voltage limit. If high voltage exceeds specified limits, take necessary corrective action. Carefully follow the instructions for +B1 volt power supply adjustment, and high voltage adjustment to maintain the high voltage within the specified limits.

PRODUCT SAFETY NOTICE

Product safety should be considered when a component replacement is made in any area of a receiver. Components indicated by mark ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. It is particularly recommended that only parts designated on the parts list in this manual be used for component replacement designated by mark ⚠. No deviations from resistance wattage or voltage ratings may be made for replacement items designated by mark ⚠.

BLOCK DIAGRAM

This is a diagram for all models and therefore differs slightly from the actual block diagram.



CIRCUIT DESCRIPTION

1.POWER SUPPLY

The power supply circuit of the EB2-A chassis is switched mode power supply with a primary side comprising of a bridge rectifier and smoothing circuit, oscillator circuit, and control circuit. The secondary circuit comprises half wave rectifiers and smoothing with voltage regulators for the 8V and 12V suppliers. The AC input voltage is full-wave rectified by the rectifier smoothing circuit, and an unstable DC voltage is generated at both terminals of the smoothing capacitor C307. This voltage is input to the oscillation circuit. The oscillation circuit is provided with a blocking oscillator circuit that switches the switching transistor Q313 ON and OFF, and an oscillation frequency and a duty square wave pulse are generated in the input windings according to operation of the control circuit. A square-wave pulse whose size is dependent on the turn ratio of the input and output windings is obtained in the output winding. This is rectified in the output rectifier circuit, and the desired DC voltage is obtained.

2.VIF & DEFLECTION (TDA8361)

The IF output signal from the tuner passes through the SAW filter, which segregates the VIF signal, and it is input to pin45 and pin46 of IC101. The signal input to the IC passes through the IF amplifier, video detection and video amplifier circuits and is output from pin7 as a composite video signal. And after this signal is converted to impedance at Q122, supplies to the video and chroma amplifier stages.

The sync.-separation circuit separates the video signals applied to pin13(internal video signal) or pin15(external video signal) to vertical- and horizontal-sync. signals respectively. The horizontal oscillator requires no external components and is fully integrated. The oscillator is always running when the start-pin36 is supplied with 8V. Horizontal drive signal is output from pin37. VR401 is for adjustment of the horizontal centring. The separated vertical-sync. signal from sync. separation circuit passes through the vertical-separation circuit, and applied to trigger divider circuit. The horizontal oscillation pulse and input vertical sync. pulse are monitored by the trigger divider circuit, and switching 50Hz and 60Hz system, the vertical amplitude automatically adjusted for 50Hz and 60Hz. The output signal from the trigger divider is triggered vertical oscillation circuit consisting of C401, R402 and pin42, and vertical drive pulse is output from pin43. VR451 is for changing the amount of AC feedback applied to pin41 and for adjustment of the vertical amplitude.

3.SIF & NICAM (TDA8204, TDA8205)

The IF signal from the tuner is also supplied to the NICAM & MONO unit on pin 5 of socket KA. On the NICAM & MONO panel the IF signal is fed into the detector IC, IC2901, via the saw filter. The SIF is detected, and the detected signal is fed to pin 7 IC2902 for processing.

4.VIDEO CHROMA & R.G.B. (TDA8361)

The composite video signal output from the pin7 of IC101 passes through Q122/Q124, and it is supplied to pin13. The external video signal output from SCART is supplied to pin15. The video signal input to pin13 or pin15 is separated to luminance (Y) signal and chroma signal in IC101. These pins are used in common with H/V-sync. separation input. The peaking of Y signal is adjusted by DC voltage of pin14. ("SHARPNESS" control) The chroma signal is divided into R-Y and B-Y chroma signals, demodulated in IC101, and output from pin30 (R-Y) and pin31 (B-Y). These chroma signals pass through the 1H delay line circuit (IC270), and they are input to pin29 (R-Y) and pin28 (B-Y). These R-Y/B-Y signals pass through RGB matrix circuit and RGB selector circuit of IC101. The internal RGB signals are generated in RGB matrix circuit and the RGB selector, consisting linear amplifiers, clamps and selects either the internal RGB signals or the external RGB signals input from pin22(R), pin23(G), pin24(B). Selection is controlled by the voltage at the RGB switch control (pin21) and mixed RGB modes are possible since RGB switching is fast. The RGB switch also functions as a fast blanking pin by blanking the RGB output stages; here internal and external RGB signals are overruled. The colour gain is controlled by DC voltage of pin26. ("COLOUR" control) The contrast control voltage present at pin25, and the brightness control voltage present at pin17 controls DC level of RGB signals. The RGB signals are finally buffered before being available at the RGB output pins [pin20 (R), pin19 (G), pin18 (R)].

5.TONE & VOLUME (TDA8424)

The left and right audio information from pins 27 (ADLI) and 28 (ADRI) of IC2902, respectively, and into pins 1 and 3 of IC2904, on the NICAM & MONO unit. Within this IC the volume, treble, and bass parameters are adjusted via I^2C control. The left and right audio signals are output from pins 11 and 13.

6.AUDIO OUTPUT(TDA7263M)

The audio signals output from the audio unit are input to pin1(L) and 5(R) of IC171 and passes through the pre-

amplifier circuit and drive circuit, after which it is input to the audio amplifier. The audio amplifier is an SEPP (single-ended, push-pull) OTL type and output to pin8(R) and 10(L) to directly drive the speakers.

7.VERTICAL OUTPUT (LA7832)

An IC (LA7832) is used for the vertical output circuit in this chassis. The vertical drive pulse from pin43 of IC101 is input to pin4 of IC451. This pulse drives IC451, and vertical scanning is performed. In the first half of scanning a deflecting current is output from pin2 and passes through the following path:
Vcc(B4) → D451 → pin3 → pin2 → DY → C461 → VR451/R459. An electric charge is then stored in C461. In the last half of scanning the current path is C461 → DY → pin2 → pin1 → VR451/R459 → C461. In this way, an amplifying sawtooth waveform current flows directly to DY to perform electron beam defection. Next, in the first half of the banking period the vertical drive pulse suddenly becomes OFF, and in order to reduce the current flowing to DY, the current path becomes as follows by the inductance of DY:
DY → pin2 → pin1 → VR451/R459 → C461 → DY. Also, when the charge of DY has dissipated, the current path becomes Vcc24V → pin6 → pin7 → C452 → pin3 → pin2→ DY → C461 → VR451/R459, and when the prescribed current value is reached, the vertical drive pulse becomes ON. This completes one cycle.

8.HORIZONTAL OUTPUT

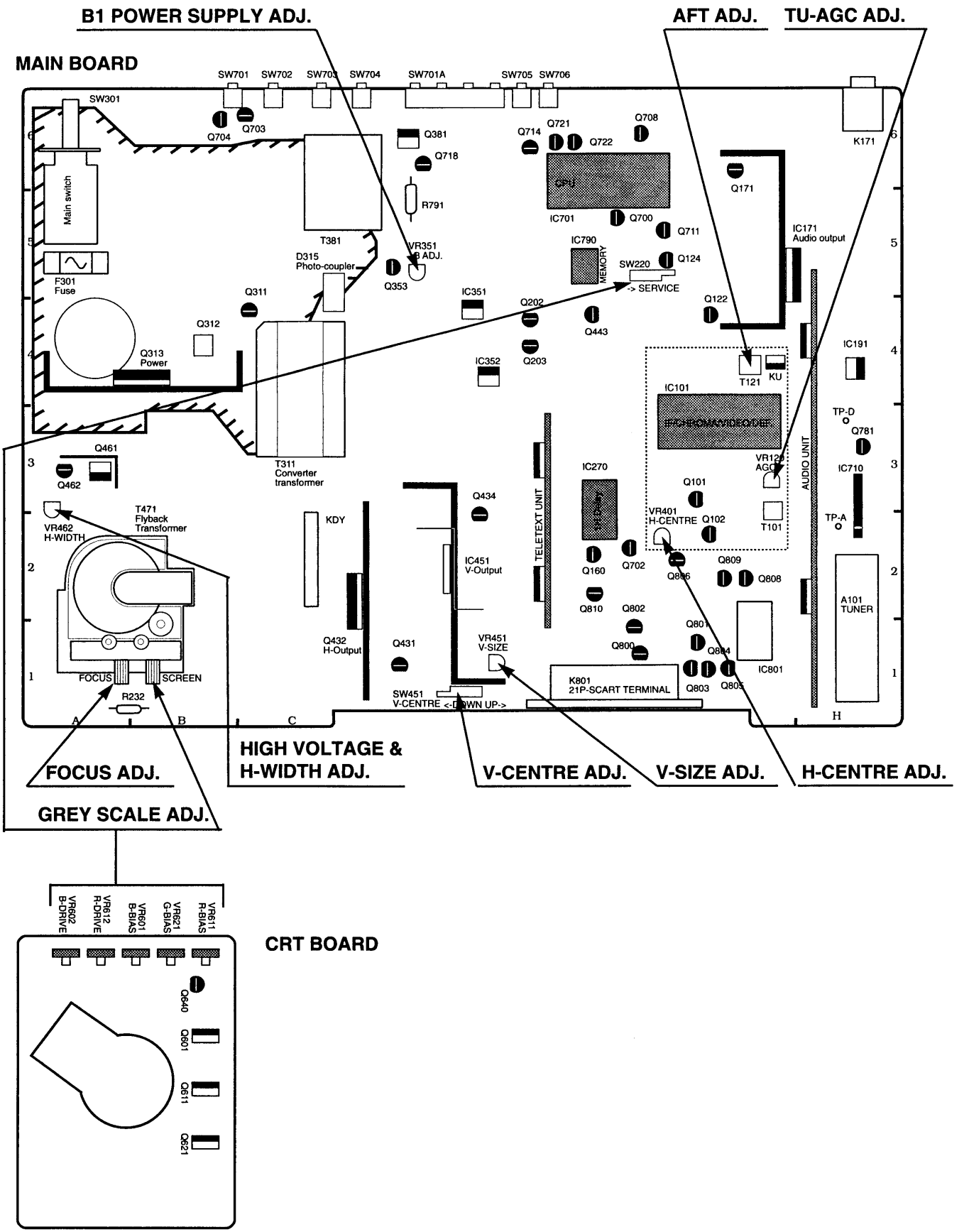
A horizontal oscillation signal is output from pin37 of IC101 and switches the drive transistor Q431. This switching signal is current amplified by the drive transformer T431 and drives the output transistor Q432. When Q432 becomes ON, an amplifying current flows directly to DY through C441/442 → DY → 0432 → GND, and defection is performed in the last half of the scanning period. Next, when Q432 becomes OFF, the charge that had been stored in DY up to that point releases a resonance current to the resonant capacitors C420 and C427 and charges them.The current stored in C420 and C427 is then flowed back to DY, and an opposite charge is then stored in DY. This opposite charge then switches the dumper diode in Q432 ON, the resonance state is completed, and an amplifying current is then flowed again directly to DY through the dumper diode. By this means, deflection in the first half of the scanning period is performed, and when Q432 becomes ON at the end of the first half of the scanning period, deflection during the last half is begun, thus completing one cycle.

9.CPU

Pin description

Pin1: H-sync. input (Horizontal pulse for OSD)
Pin2: V-sync. input (Vertical pulse for OSD)
Pin3: Not used(Open)
Pin4: Colour control output (6-bit DAC)
Pin5: Brightness control output (6-bit DAC)
Pin6: Contrast control output (6-bit DAC)
Pin7: Sharpness control output(6-bit DAC)
Pin8: Not used (GND)
Pin9: TV/AV output (L:AV mode)
Pin10: Not used(H)
Pin11: Not used (GND)
Pin12: I^2C bus SCL (Serial clock for memory)
Pin13: I^2C bus SDA (Serial date for memory)
Pin14: Tuning voltage output
Pin15: Ident signal input (L:No signal)
Pin16: R/C signal input
Pin17/18: Band select option input
Pin19: Ignor output
Pin20: SCART auto switch input (L:VCR Play)
Pin21/22: Band selector output
Pin23: Supply Ground
Pin24: Oscillator input for CPU
Pin25: Oscillator output for CPU
Pin26: Supply Ground
Pin27: Power supply(+5V)
Pin28: Oscillator output for OSD
Pin29: Oscillator input for OSD
Pin30: Reset input
Pin31: Protect signal input (L:Power circuit defects)
Pin32: Not used(GND)
Pin33: AFT signal input
Pin34: Keyboard scan 2
Pin35: Keyboard scan 1
Pin36: P-ON(TEXT)
Pin37: S-VHS detect input(Sin:H)
Pin38~45: Not used (GND)
Pin46: Not used(GND)
Pin47: Mute output in no picture(FTZ mute)
Pin48: Power ON/OFF output (H:ON)
Pin49: Blanking output for OSD
Pin50: Not used (Open)
Pin51: Green output for OSD
Pin52: Red output for OSD

SERVICE CONTROL ADJUSTMENT



B1 POWER SUPPLY ADJUSTMENT

1. Set VR351 to be mechanical centre before pressing the main switch.
2. Tune the receiver to PAL circular pattern.
3. Set brightness and contrast controls to normal.
4. Connect digital V-meter to R791(VR351 side).
5. By using VR351, adjust voltage to 150 ± 0.5 V .

AFT ADJUSTMENT

1. Tune the receiver to the clearest station.
2. By using T121, adjust AFT to obtain the best picture.

AGC ADJUSTMENT

NOTE: ***Do not attempt this adjustment with weak signal.***

1. Tune the receiver to the clearest station.
2. Set AGC VR(VR120) in direction which causes snow noise to appear, then in the opposite direction until snow noise just disappears.

GREY SCALE ADJUSTMENT

[SCREEN VR ADJUSTMENT]

1. Tune the receiver to the white pattern.
2. Set brightness control to display centre and contrast control to normal.
3. Set SW220 to "SERVICE" position.
4. Set VR602 and VR612 to be the mechanical centre.
5. Turn VR601, VR611 and VR621 fully counter-clockwise.
6. Set screen VR for one colour to be just visible.

[BIAS VR ADJUSTMENT]

7. By using VR601, VR611 or VR621, adjust line to be white.
8. Set SW220 to "NORMAL" position.

[DRIVE VR ADJUSTMENT]

9. By using VR602 and VR612, adjust white balance.

HIGH VOLTAGE & WIDTH ADJUSTMENT

[HIGH VOLTAGE ADJUSTMENT]

1. Tune the receiver to PAL circular pattern.
2. Set brightness and contrast controls to maximum.
3. Connect digital V-meter to both terminals of R232(left side)(+) , and high voltage meter to CRT anode.
4. Confirm high voltage to be 26.0 ± 1 KV at beam current 1.1, and less than 29.0 KV at 0 beam current.

[H-WIDTH ADJUSTMENT]

5. If H-width is too wide or narrow, adjust VR462 to obtain proper H- width.
6. Reconfirm high voltage.

H-CENTRE ADJUSTMENT

1. Tune the receiver to circular pattern.
2. Adjust H-centre by using VR401.

V-CENTRE ADJUSTMENT

1. Tune the receiver to circular pattern.
2. Adjust V-centre by using SW451.

V-SIZE ADJUSTMENT

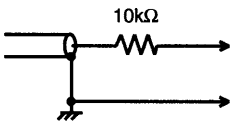
1. Tune the receiver to circular pattern.
2. Adjust V-size by using VR451.

FOCUS ADJUSTMENT

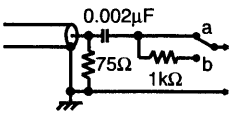
By using FOCUS VR, adjust focus control for well scanning lines.

CIRCUIT ALIGNMENT

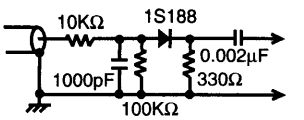
VIF ALIGNMENT



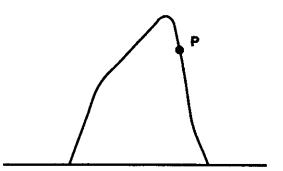
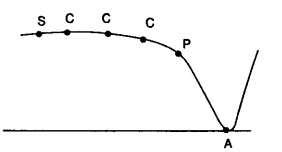
Input probe



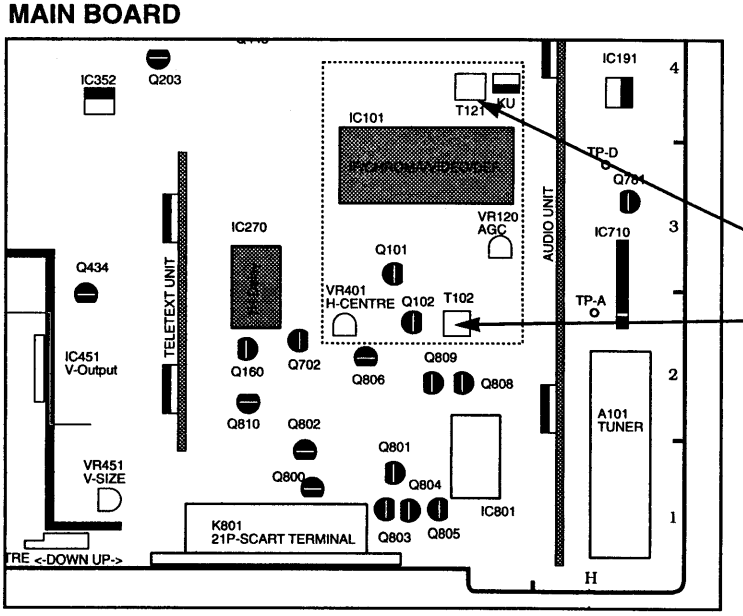
Output probe



Input probe for TRAP ADJ.

		DETECTOR ADJUSTMENT	TRAP WAVEFORM
SETTING	DC 15V AGC voltage (4.3-4.5V) Output probe Input probe System Sweep ATT Marker Freq.	IC351-1 IC101-48 p Tuner IF Q124-E I 9dB P=39.5MHz	IC351-1 IC101-48 p Tuner IF Q124-E I 9dB A=41.5MHz
Adjustment		By using T121, adjust "P" to be maximum amplitude.	By using T102, adjust A to be bottom of CH TRAP.
VIF waveform			

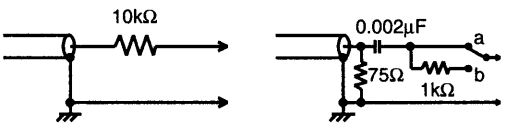
MAIN BOARD



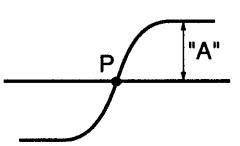
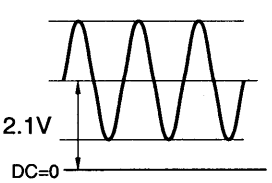
Detector adjustment

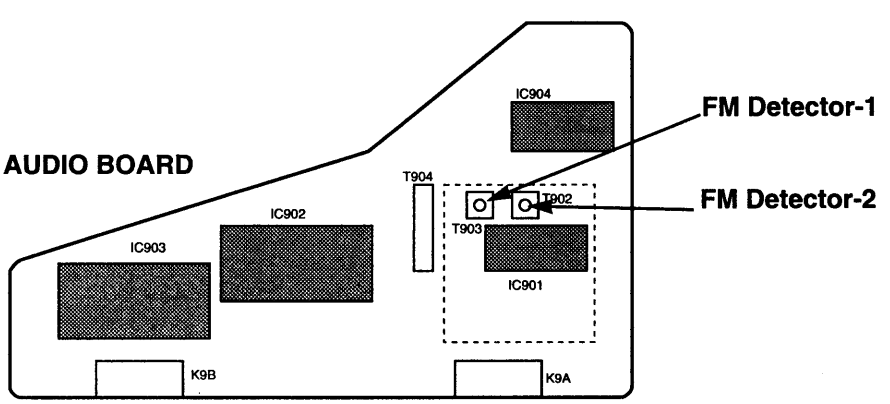
TRAP waveform

SIF ALIGNMENT



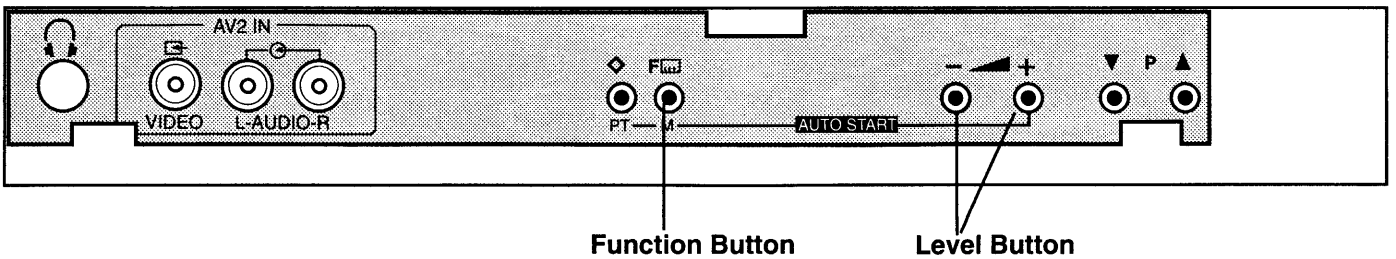
Input probe Output probe

		FM DETECTOR-1	FM DETECTOR-2
SETTING	DC 5V AGC voltage Output probe Input probe Sweep ATT Marker Frequency	IC901-15pin IC901-3pin IC901-1pin (Side b) IC901-14pin 10 39.5MHz	IC901-15pin -- IC901-12pin (Side b) IC901-6pin **(Condition)** Carrier frequency: 6.0MHz Modulation frequency: 1kHz(sine waveform)
Adjustment		1. Adjust AGC voltage to be "A" = 0.5Vp-p. 2. By using T903, adjust "P" to be equal centre line.	By using T902, adjust DC level to be 2.1V.
VIF waveform			



MC-Service

MEMORY IC REPLACEMENT (Important Notice)



Function Button

Level Button

When you replace a memory IC (IC790), it is necessary to initialise the IC as follows.

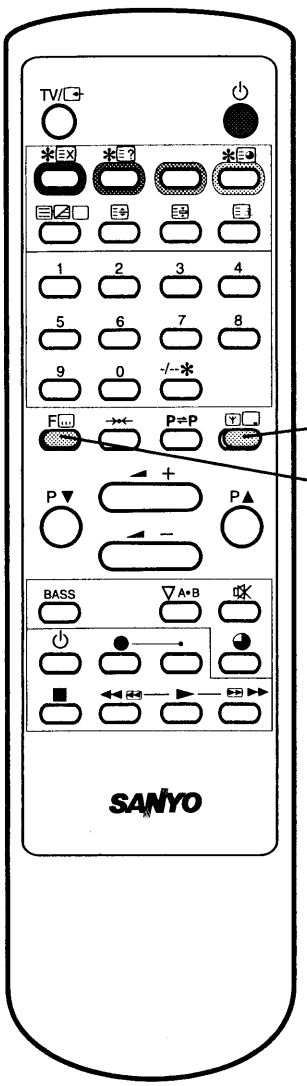
A. Initialisation of Memory IC

1. When you press and hold the Function button on the TV set and then press the Recall button on the RC transmitter, the following picture will appear on the screen.

ITEM -1	SET→ 0

2. Confirm SET number of all items is **"0"** by pressing the Function button.
3. If it is not "0", change to "0" by the Level (+/-) button. (Changing the SET number, automatically memorised.)
4. Press the Recall button, to return the normal TV mode.

For more information, please refer to "special functions" on the instruction manual.

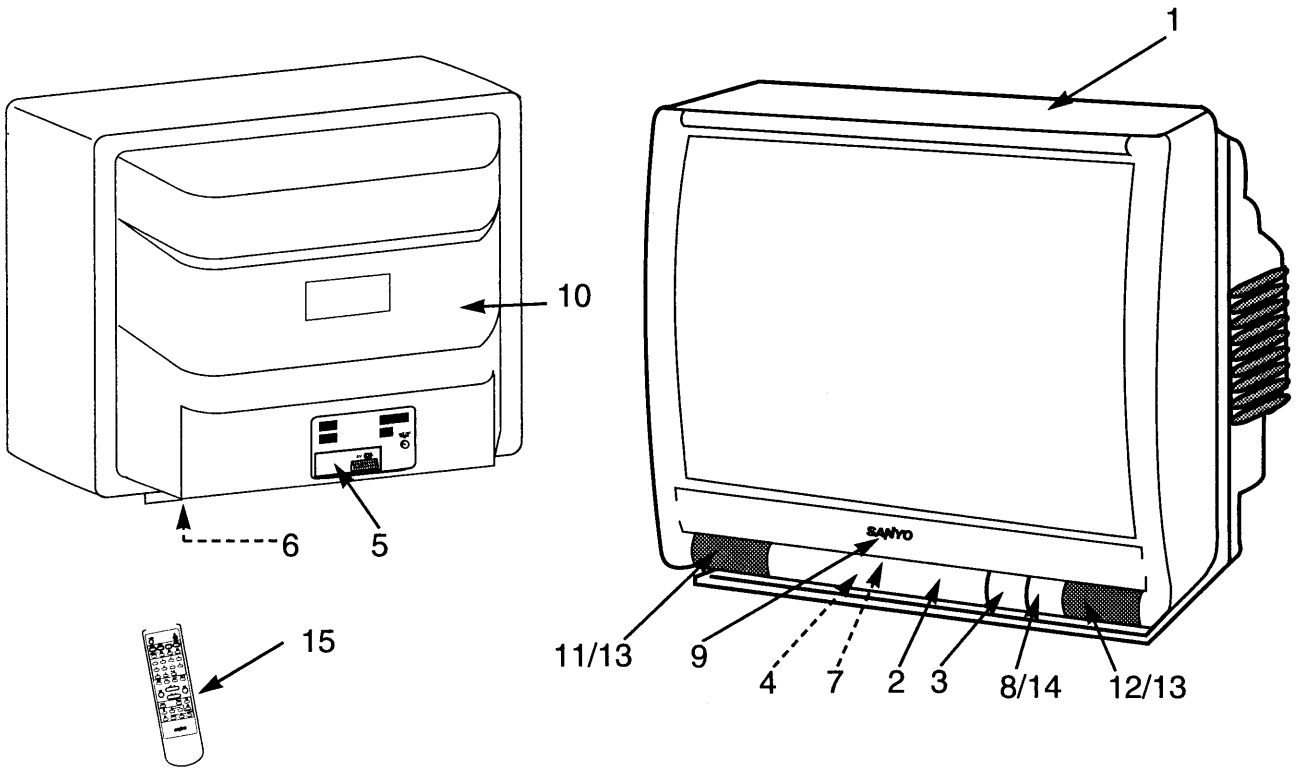


Recall Button

Function Button

CABINET PARTS LIST

Note: Parts order must contain Service ref No., Part No. and a Description.



SERVICE REF. NO. C25EG85NB-00

Key No.	Part No.	Description
	CABINET PARTS	
1	610 258 1515	ASSY,CABINET FR-E6YR
2	610 258 4615	DOOR-E6YR
3	610 258 1577	DEC BOARD-E6YR
4	610 252 7469	DEC SHEET-E6YB
5	610 252 7476	DEC SHEET REAR-E6YB
6	610 252 9609	DEC SHEET BOTTOM-E6YB
7	610 104 2505	LATCH PUSH,7.9X6.9BK
8	610 217 9415	SPRING-E4AC
9	610 104 6336	SANYO BADGE-D7PA
10	610 254 8372	CABINET BACK-E6YB
11	610 258 1591	GRILLE SPEAKER-R-E6YR
12	610 258 1607	GRILLE SPEAKER-L-E6YR
13	610 247 9959	NET CLOTH-E6YC
	KNOBS	
14	610 258 1546	BUTTON-E6YR
	ACCESSORIES	
15	JXTE	RC TRANSMITTER
	645 009 8628	ASSY,REMOCON JXTE
	610 251 6876	RC-CASE TOP-JXTA
	610 251 6883	RC-CASE BOTTOM-JXTA
	610 251 6890	RC-BATTERY LID-JXTA
	610 251 6906	RC-TRANSPARENT BOARD-JXTA
	610 255 7787	DEC RC SHEET-JXTE

Key No.	Part No.	Description

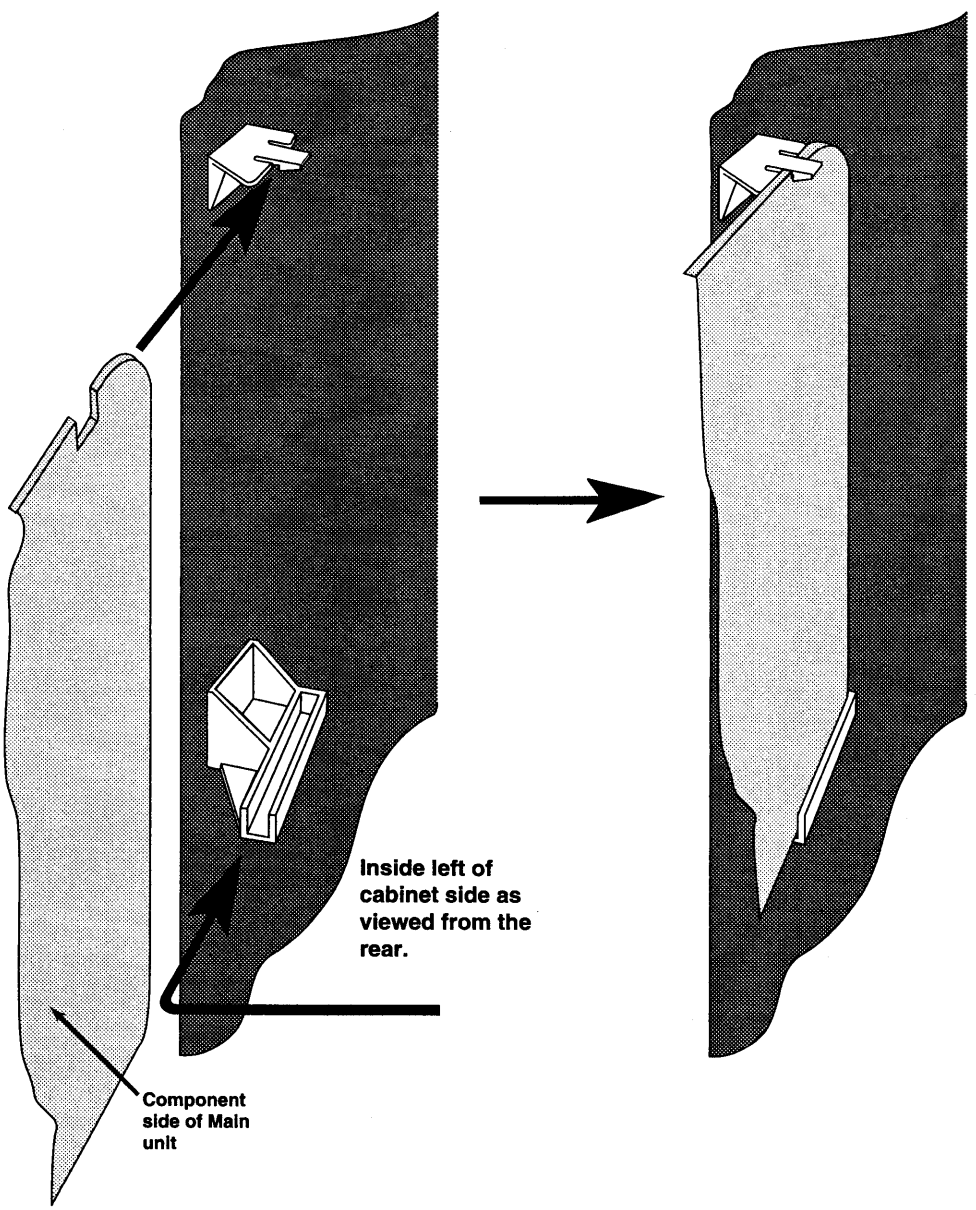
SERVICE POSITION

1) With the back cover removed pull the Main board backwards out of the built in chassis rails on the cabinet bottom.

2) Rotate the board through 90° so that the component side faces inwards.

3) Slide the bottom of the board into the groove in the bottom holder located on the left inner face of the cabinet, and locate the cut out in the top edge of the board into the catch on the top holder.

Note: You may have to release some of the wires from their dressing holders.



CHASSIS ELECTRICAL PARTS LIST

Product safety should be considered when a component replacement is made in any area of a receiver. Components indicated by a ⚠ mark in this parts list and the circuit diagram show components whose value have special significance to product safety. It is particularly recommended that only parts specified on the following parts list be used for components replacement pointed out by the mark.

Note Parts order must contain Service Ref. No., Part No., and descriptions.

Ref. No.	Part No.	Description

Read description in the Capacitor and Resistor as follows:

CAPACITOR
CERAMIC 100P K 50V

- 50V — Rated Voltage
- K — Tolerance Symbols:

  Less than 10PF
  A: Not specified B: ±0.1PF C: ±0.25PF
  D: ±0.5PF F: ±1PF G: ±2PF
  R: ±0.25-0PF S: ±0-0.25PF E: +0-1PF

  More than 10PF
  A: Not specified B: ±0.1% C: ±0.25%
  D: ±0.5% F: ±1% G: ±2%
  H: ±3% J: ±5% K: ±10%
  L: ±15% M: ±20% N: ±30%
  P: +100-0% Q: +30-10% T: +50-10%
  U: +75-10% V: +20-10% W: +100-10%
  X: +40-20% Y: +150-10% Z: +80-20%
- 100P — Rated value: P=pico farad, U=Micro farad
- CERAMIC — Material:

CERAMIC..... Ceramic
MT-PAPER..... Metallized Paper
POLYESTER..... Polyester
MT-POLYEST.... Metallized Polyester
POLYPRO..... Polypropylene
MT-POLYPRO.... Metallized Polypropylene
COMPO FILM..... Composite film
MT-COMPO..... Metallized Composite
STYRENE..... Styrene
TA-SOLID..... Tantalum Solid
AL-SOLID..... Aluminium Solid
ELECT..... Electrolytic
NP-ELECT..... Non-polarized Electrolytic
OS-SOLID..... Aluminium Solid with Organic Semiconductive Electrolytic
DL-ELECT..... Doble Layered Electrolytic

RESISTOR
CARBON 4.7K J A 1/4W

- 1/4W — Rated Wattage
- A — Performance Symbols:
  A: General B: Non flammable Z: Low noise
  Other: Temperature coefficient
- J — Tolerance Symbols:
  A: ±0.05% B: ±0.1% C: ±0.25% D: ±0.5%
  F: ±1% G: ±2% J: ±5% K: ±10%
  M: ±20% P: +5-15%
- 4.7K — Rated value, ohms:
  K: 1,000, M: 1,000,000
- CARBON — Material:

CARBON..... Carbon
MT-FILM..... Metal Film
OXIDE-MT..... Oxide Metal Film
SOLID..... Composition
MT-GLAZE..... Metal Glaze
WIRE WOUND... Wire Wound
CERAMIC RES.. Ceramic
FUSIBLE RES.... Fusible

Ref. No.	Part No.	Description

SERVICE REF. NO.
C25EG85NB-00

OUT OF CIRCUIT BOARD

PICTURE TUBE		
⚠Q901	414 007 1104	CRT A59ECY13X38
COIL		
⚠L901	645 003 0031	COIL,DEGAUSSING
	645 003 0062	COIL,DEGAUSSING
MISCELLANEOUS		
SP901	610 232 3986	SPEAKER
	610 228 7202	SPEAKER
SP902	610 232 3986	SPEAKER
	610 228 7202	SPEAKER
⚠W901	645 000 2458	CORD,POWER
W902	610 024 2210	GROUNDING CONNECTOR-D8AC
	610 204 6083	GROUNDING CONNECTOR

ASSY,PWB,CRT E7PD 1AA0B10E00800

TRANSISTOR		
Q601	405 041 6507	TR 2SC2621-D-RA
	405 041 6705	TR 2SC2621-E-RA
	405 066 9903	TR 2SC2688(1)-K
	405 067 0008	TR 2SC2688(1)-L
	405 067 0107	TR 2SC2688(1)-M
Q611	405 041 6507	TR 2SC2621-D-RA
	405 041 6705	TR 2SC2621-E-RA
	405 066 9903	TR 2SC2688(1)-K
	405 067 0008	TR 2SC2688(1)-L
	405 067 0107	TR 2SC2688(1)-M
Q621	405 041 6507	TR 2SC2621-D-RA
	405 041 6705	TR 2SC2621-E-RA
	405 066 9903	TR 2SC2688(1)-K
	405 067 0008	TR 2SC2688(1)-L
	405 067 0107	TR 2SC2688(1)-M
Q640	406 000 6804	TR 2SA1015-GR(SAN)
	405 001 7407	TR 2SA1015-O(SAN)
	405 001 7605	TR 2SA1015-Y(SAN)
	405 004 3109	TR 2SA564A-Q(CU)
	405 004 3208	TR 2SA564A-R(CU)
	405 004 4205	TR 2SA608-E-CTV-NP
	405 004 4809	TR 2SA608-F-CTV-NP
	405 006 1103	TR 2SA933-Q
	405 006 1202	TR 2SA933-R
	405 006 1707	TR 2SA933S-Q
	405 006 1806	TR 2SA933S-R
CAPACITOR		
C601	403 072 7708	CERAMIC 330P K 50V

MC-Service

Ref. No.	Part No.	Description
C611	403 072 7708	CERAMIC 330P K 50V
C621	403 072 7708	CERAMIC 330P K 50V
C631	403 077 2708	CERAMIC 1000P P 2K
RESISTOR		
R601	401 018 2800	CARBON 330 JA 1/4W
R602	401 018 3807	CARBON 3.3K JA 1/4W
R603	401 012 5708	CARBON 1K JA 1/4W
R604	401 065 4604	OXIDE-MT 12K JA 2W
R605	401 002 0102	SOLID 3.3K KA 1/2W
R611	401 018 2800	CARBON 330 JA 1/4W
R612	401 018 3807	CARBON 3.3K JA 1/4W
R613	401 016 3809	CARBON 2.2K JA 1/4W
R614	401 065 4604	OXIDE-MT 12K JA 2W
R615	401 002 0102	SOLID 3.3K KA 1/2W
R621	401 018 2800	CARBON 330 JA 1/4W
R622	401 018 3807	CARBON 3.3K JA 1/4W
R623	401 015 2704	CARBON 1.8K JA 1/4W
R624	401 065 4604	OXIDE-MT 12K JA 2W
R625	401 002 0102	SOLID 3.3K KA 1/2W
R627	401 020 0801	CARBON 470 JA 1/4W
R631	401 001 7607	SOLID 270K KA 1/2W
R641	401 020 2003	CARBON 4.7K JA 1/4W
R642	401 018 3807	CARBON 3.3K JA 1/4W
R644	401 019 1000	CARBON 390 JA 1/4W
VARIABLE RESISTOR		
VR601	645 003 4121	VR,SEMI,4.7K S
VR602	645 002 1916	VR,SEMI,1K S
VR611	645 003 4121	VR,SEMI,4.7K S
VR612	645 002 1916	VR,SEMI,1K S
VR621	645 003 4121	VR,SEMI,4.7K S
COIL		
L601	645 008 0012	INDUCTOR,330U K
L611	645 008 0012	INDUCTOR,330U K
L621	645 008 0012	INDUCTOR,330U K
MISCELLANEOUS		
⚠K601	610 233 7990	CRT SOCKET

ASSY,PWB,TEXT E7PC 1AA0B10E05300 A

TRANSISTOR		
Q1001	405 109 4407	TR BC848-B
	405 015 8704	TR 2SC2812-L6-TA
Q1002	405 109 4407	TR BC848-B
	405 015 8704	TR 2SC2812-L6-TA
Q1003	405 109 4407	TR BC848-B
	405 015 8704	TR 2SC2812-L6-TA
Q1004	405 109 4407	TR BC848-B
	405 015 8704	TR 2SC2812-L6-TA
Q1005	405 109 4407	TR BC848-B
	405 015 8704	TR 2SC2812-L6-TA
Q1006	405 109 4407	TR BC848-B
	405 015 8704	TR 2SC2812-L6-TA
Q1007	405 109 4407	TR BC848-B
	405 015 8704	TR 2SC2812-L6-TA
INTEGRATED CIRCUIT		
IC1001	409 299 5701	IC SAA5244AP
IC1002	409 018 7603	IC LA7016
CAPACITOR		
C1001	403 166 6808	MT-POLYEST 0.1U J 63V
	403 243 6806	MT-COMPO 0.1U J 50V
C1002	403 248 1608	ELECT 47U M 16V
C1003	403 166 6808	MT-POLYEST 0.1U J 63V
	403 243 6806	MT-COMPO 0.1U J 50V
C1004	403 032 8608	CERAMIC 8P D 50V
C1005	403 012 6808	CERAMIC 15P J 50V
C1006	403 056 8103	POLYESTER 1000P K 50V
	403 179 3900	POLYESTER 1000P K 50V
C1007	403 166 6808	MT-POLYEST 0.1U J 63V
	403 243 6806	MT-COMPO 0.1U J 50V
C1008	403 166 6808	MT-POLYEST 0.1U J 63V
	403 243 6806	MT-COMPO 0.1U J 50V
C1009	403 166 6808	MT-POLYEST 0.1U J 63V
	403 243 6806	MT-COMPO 0.1U J 50V
C1010	403 166 6808	MT-POLYEST 0.1U J 63V
	403 243 6806	MT-COMPO 0.1U J 50V
C1020	403 248 1905	ELECT 10U M 16V
C1021	403 248 1905	ELECT 10U M 16V
C1025	403 069 9500	CERAMIC 0.01U Z 50V
RESISTOR		
R1001	401 038 2200	MT-GLAZE 27K JA 1/10W
R1002	401 038 7809	MT-GLAZE 56K JA 1/10W
R1003	401 038 3603	MT-GLAZE 3.3K JA 1/10W
R1005	401 038 7502	MT-GLAZE 56 JA 1/10W
R1008	401 038 9506	MT-GLAZE 75 JA 1/10W
R1011	401 038 9506	MT-GLAZE 75 JA 1/10W
R1012	401 038 0701	MT-GLAZE 2.2K JA 1/10W
R1013	401 037 5400	MT-GLAZE 1K JA 1/10W
R1014	401 038 3603	MT-GLAZE 3.3K JA 1/10W
R1015	401 038 9308	MT-GLAZE 68K JA 1/10W
R1016	401 038 5003	MT-GLAZE 390 JA 1/10W
R1018	401 037 5608	MT-GLAZE 10K JA 1/10W
R1020	401 037 5202	MT-GLAZE 100 JA 1/10W
R1021	401 037 5202	MT-GLAZE 100 JA 1/10W
R1022	401 037 5202	MT-GLAZE 100 JA 1/10W
R1023	401 038 6307	MT-GLAZE 470 JA 1/10W
R1024	401 038 6307	MT-GLAZE 470 JA 1/10W
R1025	401 037 5400	MT-GLAZE 1K JA 1/10W
R1026	401 037 5400	MT-GLAZE 1K JA 1/10W
R1027	401 037 5608	MT-GLAZE 10K JA 1/10W
R1029	401 038 0800	MT-GLAZE 22K JA 1/10W
R1030	401 038 0800	MT-GLAZE 22K JA 1/10W
R1031	401 038 2200	MT-GLAZE 27K JA 1/10W
COIL		
L1002	610 252 0170	PEAKING COIL 3.3UHK
DIODE		
D1001	407 048 1103	ZENER DIODE EQA02-05D
	407 053 6308	ZENER DIODE MTZ5.1B
MISCELLANEOUS		
X1001	610 249 6024	CRYSTAL OSCILLATOR

ASSY,PWB,NICAM&MONO E7PC 1AA0B10E05300 B

TRANSISTOR		
Q2901	405 109 4407	TR BC848-B
	405 015 8704	TR 2SC2812-L6-TA
Q2902	405 109 4407	TR BC848-B
	405 015 8704	TR 2SC2812-L6-TA
Q2903	405 109 4407	TR BC848-B
	405 015 8704	TR 2SC2812-L6-TA
Q2961	405 109 4407	TR BC848-B
	405 015 8704	TR 2SC2812-L6-TA
Q2962	405 109 4407	TR BC848-B
	405 015 8704	TR 2SC2812-L6-TA
INTEGRATED CIRCUIT		
IC2901	409 333 3601	IC TDA2546A/V4
IC2902	409 304 6006	IC TDA8205
IC2903	409 304 5900	IC TDA8204
IC2904	409 316 4601	IC TDA8424

Ref. No.	Part No.	Description
CAPACITOR		
C2900	403 069 9500	CERAMIC 0.01U Z 50V
C2901	403 166 8000	MT-POLYEST 0.33U J 63V
	403 256 4608	MT-COMPO 0.33U J 50V
C2902	403 166 7805	MT-POLYEST 0.047U J 63V
	403 256 1102	MT-COMPO 0.047U J 50V
C2903	403 152 4702	NP-ELECT 10U M 16V
C2906	403 013 3004	CERAMIC 150P J 50V
C2908	403 194 4609	ELECT 470U M 16V
C2909	403 069 9500	CERAMIC 0.01U Z 50V
C2910	403 069 9500	CERAMIC 0.01U Z 50V
C2911	403 073 9107	CERAMIC 4700P K 50V
C2913	403 028 4102	CERAMIC 56P J 50V
C2915	403 074 6600	CERAMIC 560P K 50V
C2916	403 069 9500	CERAMIC 0.01U Z 50V
C2917	403 248 1905	ELECT 10U M 16V
C2918	403 069 9500	CERAMIC 0.01U Z 50V
C2919	403 069 9500	CERAMIC 0.01U Z 50V
C2920	403 069 9500	CERAMIC 0.01U Z 50V
C2921	403 069 9500	CERAMIC 0.01U Z 50V
C2922	403 069 9500	CERAMIC 0.01U Z 50V
C2923	403 069 9500	CERAMIC 0.01U Z 50V
C2924	403 043 9601	ELECT 47U M 16V
C2924A	403 194 4609	ELECT 470U M 16V
C2926	403 069 9500	CERAMIC 0.01U Z 50V
C2927	403 043 9601	ELECT 47U M 16V
C2928	403 069 9500	CERAMIC 0.01U Z 50V
C2929	403 043 9601	ELECT 47U M 16V
C2930	403 044 7309	ELECT 10U M 25V
C2931	403 018 7403	CERAMIC 220P J 50V
C2932	403 018 7403	CERAMIC 220P J 50V
C2933	401 037 5004	MT-GLAZE 0.000 ZA 1/10W
C2934	403 166 6808	MT-POLYEST 0.1U J 63V
	403 243 6806	MT-COMPO 0.1U J 50V
C2935	403 258 3401	ELECT 10U M 25V
C2936	403 069 9500	CERAMIC 0.01U Z 50V
C2937	403 075 0706	CERAMIC 6800P K 50V
C2938	403 069 9500	CERAMIC 0.01U Z 50V
C2939	403 075 0706	CERAMIC 6800P K 50V
C2940	403 074 9502	CERAMIC 680P K 50V
C2941	403 248 1905	ELECT 10U M 16V
C2942	403 248 1905	ELECT 10U M 16V
C2943	403 248 1905	ELECT 10U M 16V
C2944	403 248 1905	ELECT 10U M 16V
C2946	403 038 6707	ELECT 220U M 6.3V
C2949	403 012 7003	CERAMIC 15P J 50V
C2951	403 013 3004	CERAMIC 150P J 50V
C2952	403 075 0706	CERAMIC 6800P K 50V
C2953	403 011 4904	CERAMIC 120P J 50V
C2954	403 166 8109	MT-POLYEST 0.22U J 63V
	403 263 5704	MT-COMPO 0.22U J 50V
C2956	403 166 8208	MT-POLYEST 0.18U J 63V
	403 264 1903	MT-COMPO 0.18U J 50V
C2961	403 233 0302	ELECT 100U M 16V
C2962	403 166 6808	MT-POLYEST 0.1U J 63V
	403 243 6806	MT-COMPO 0.1U J 50V
C2963	403 060 8403	POLYESTER 0.033U K 50V
	403 179 1609	POLYESTER 0.033U K 50V
C2964	403 074 7607	CERAMIC 5600P K 50V
C2968	403 074 7607	CERAMIC 5600P K 50V
C2969	403 060 8403	POLYESTER 0.033U K 50V
	403 179 1609	POLYESTER 0.033U K 50V
RESISTOR		
R2904	401 039 0304	MT-GLAZE 820 JA 1/10W
R2906	401 039 0304	MT-GLAZE 820 JA 1/10W
R2907	401 038 7601	MT-GLAZE 560 JA 1/10W
R2908	401 038 2002	MT-GLAZE 270 JA 1/10W
R2909	401 037 5202	MT-GLAZE 100 JA 1/10W
R2911	401 037 5608	MT-GLAZE 10K JA 1/10W
R2912	401 038 2002	MT-GLAZE 270 JA 1/10W
R2913	401 038 0701	MT-GLAZE 2.2K JA 1/10W
R2914	401 038 0701	MT-GLAZE 2.2K JA 1/10W
R2916	401 038 4907	MT-GLAZE 39 JA 1/10W
R2917	401 038 6208	MT-GLAZE 47 JA 1/10W
R2918	401 038 9001	MT-GLAZE 680 JA 1/10W
R2919	401 038 7700	MT-GLAZE 5.6K JA 1/10W
R2921	401 038 7700	MT-GLAZE 5.6K JA 1/10W
R2922	401 038 6000	MT-GLAZE 43K JA 1/10W
R2923	401 039 0403	MT-GLAZE 8.2K JA 1/10W
R2924	401 038 7700	MT-GLAZE 5.6K JA 1/10W
R2926	401 038 6000	MT-GLAZE 43K JA 1/10W
R2929	401 038 5300	MT-GLAZE 39K JA 1/10W
R2931	401 094 1902	MT-GLAZE 10M JA 1/10W
R2932	401 037 7800	MT-GLAZE 150 JA 1/10W
R2933	401 037 6704	MT-GLAZE 1.2K JA 1/10W
R2934	401 037 5400	MT-GLAZE 1K JA 1/10W
R2936	401 037 5806	MT-GLAZE 1M JA 1/10W
R2937	401 038 2002	MT-GLAZE 270 JA 1/10W
R2938	401 037 6704	MT-GLAZE 1.2K JA 1/10W
R2939	401 037 5400	MT-GLAZE 1K JA 1/10W
R2941	401 037 5202	MT-GLAZE 100 JA 1/10W
R2942	401 037 5202	MT-GLAZE 100 JA 1/10W
R2946	401 037 5004	MT-GLAZE 0.000 ZA 1/10W
R2956	401 037 5202	MT-GLAZE 100 JA 1/10W
R2957	401 037 5202	MT-GLAZE 100 JA 1/10W
R2961	401 037 5202	MT-GLAZE 100 JA 1/10W
R2962	401 038 7601	MT-GLAZE 560 JA 1/10W
R2963	401 037 5202	MT-GLAZE 100 JA 1/10W
R2964	401 038 7601	MT-GLAZE 560 JA 1/10W
TRANSFORMER		
T2902	610 037 5512	S COIL
T2903	610 037 4522	S COIL
T2904	610 208 6072	S BLOCK
COIL		
L2901	645 008 2221	INDUCTOR,2.2U K
L2902	645 008 2221	INDUCTOR,2.2U K
L2903	645 008 2221	INDUCTOR,2.2U K
L2904	645 008 2221	INDUCTOR,2.2U K
DIODE		
D2902	408 007 8607	DIODE 1N4148
	407 013 1206	DIODE 1S1555
D2905	407 012 4406	DIODE 1SS133
	407 012 5809	DIODE 1SS176
MISCELLANEOUS		
K29A	645 006 2018	PLUG,6P
K29B	645 008 3228	PLUG,8P
X2900	421 002 4405	SAW F TSB5303
X2901	645 003 2813	CERAMIC FILTER
X2904	610 015 2885	TRAP,CERAMIC 6.0MHZ
X2906	610 233 0649	CRYSTAL OSCILLATOR

ASSY,PWB,MAIN E6YR 1AA0B10E056B0

TRANSISTOR		
Q101	405 013 3305	TR 2SC2216(SAN)
Q102	405 016 6204	TR 2SC3000-D
	405 016 6402	TR 2SC3000-E
	405 016 6600	TR 2SC3000-F
Q122	406 007 2106	TR JC546A
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
Q124	406 007 1901	TR JC556A
	406 007 1802	TR JC556B
	405 004 4205	TR 2SA608-E-CTV-NP
	405 004 4809	TR 2SA608-F-CTV-NP
	405 028 7909	TR 2SA608-G-CTV-NP

MC-Service

Ref. No.	Part No.	Description
Q160	406 007 2106	TR JC546A
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
Q171	406 007 2106	TR JC546A
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
Q202	406 007 2106	TR JC546A
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
Q203	406 007 2106	TR JC546A
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
Q311	406 007 1901	TR JC556A
	406 007 1802	TR JC556B
	405 004 4205	TR 2SA608-E-CTV-NP
	405 004 4809	TR 2SA608-F-CTV-NP
	405 028 7909	TR 2SA608-G-CTV-NP
Q312	405 058 0208	TR 2SC3807-R-CTV-YA
Q313	405 018 9203	TR 2SC3895-T-CTV-YB
Q353	406 007 2106	TR JC546A
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
Q381	405 014 8408	TR 2SC2568(1)-K
	405 014 8507	TR 2SC2568(1)-L
	405 041 6507	TR 2SC2621-D-RA
	405 041 6705	TR 2SC2621-E-RA
Q431	405 018 0507	TR 2SC3332-R
	405 018 0606	TR 2SC3332-S
Q432	405 095 0209	TR 2SD1556-3E
Q434	406 007 2106	TR JC546A
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
Q443	406 007 1901	TR JC556A
	406 007 1802	TR JC556B
	405 004 4205	TR 2SA608-E-CTV-NP
	405 004 4809	TR 2SA608-F-CTV-NP
	405 028 7909	TR 2SA608-G-CTV-NP
Q461	405 064 7307	TR 2SB1274-Q-RA
	405 064 7406	TR 2SB1274-R-RA
	405 064 7505	TR 2SB1274-S-RA
Q462	406 007 2106	TR JC546A
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
Q700	406 007 1901	TR JC556A
	406 007 1802	TR JC556B
	405 004 4205	TR 2SA608-E-CTV-NP
	405 004 4809	TR 2SA608-F-CTV-NP
	405 028 7909	TR 2SA608-G-CTV-NP
Q702	406 007 2106	TR JC546A
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
Q703	406 007 2106	TR JC546A
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
Q704	406 007 2106	TR JC546A
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
Q708	406 007 1901	TR JC556A
	406 007 1802	TR JC556B
	405 004 4205	TR 2SA608-E-CTV-NP
	405 004 4809	TR 2SA608-F-CTV-NP
	405 028 7909	TR 2SA608-G-CTV-NP
Q711	405 118 4207	TR PH2369
Q714	406 007 2106	TR JC546A
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
Q721	406 007 2106	TR JC546A
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
Q722	406 007 2106	TR JC546A
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
Q781	406 007 2106	TR JC546A
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
Q800	406 007 2106	TR JC546A
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
Q801	406 007 2106	TR JC546A
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
Q802	406 007 2106	TR JC546A
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
Q803	406 007 1901	TR JC556A
	406 007 1802	TR JC556B
	405 004 4205	TR 2SA608-E-CTV-NP
	405 004 4809	TR 2SA608-F-CTV-NP
	405 028 7909	TR 2SA608-G-CTV-NP
Q804	406 007 2106	TR JC546A
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
Q805	406 007 2106	TR JC546A
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
Q806	406 007 2106	TR JC546A
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
Q808	406 007 2106	TR JC546A
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
Q809	406 007 2106	TR JC546A

Ref. No.	Part No.	Description
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
Q810	406 007 2106	TR JC546A
	406 007 2007	TR JC546B
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
INTEGRATED CIRCUIT		
IC101	409 309 6209	IC TDA8361/N3
IC171	409 301 4906	IC TDA7263M
IC191	409 026 8609	IC L78M05-RA
IC270	409 291 0605	IC TDA4661/V2
	409 322 0505	IC TDA4662/V1
IC351	409 143 3402	IC AN78M12 LB
	409 026 9507	IC L78M12-RA
IC352	409 285 5203	IC L78M08-RA
IC451	409 192 5709	IC LA7833
IC701	410 233 7705	IC M37210M4-529SP
IC790	409 247 7702	IC ST24C02AB1
	409 257 7204	IC X24C02P
	409 281 8307	IC 24C02A/P
IC801	409 051 3006	IC TC4053BP
CAPACITOR		
C105	403 248 1400	ELECT 1U M 50V
C111	403 026 9703	CERAMIC 5P C 50V
C112	403 026 9703	CERAMIC 5P C 50V
C113	403 069 8305	CERAMIC 0.01U Z 50V
C114	403 069 8305	CERAMIC 0.01U Z 50V
C115	403 069 8305	CERAMIC 0.01U Z 50V
C117	403 248 1608	ELECT 47U M 16V
C121	403 270 2901	MT-POLYEST 0.1U K 63V
	403 237 8007	MT-COMPO 0.1U J 50V
C122	403 270 2901	MT-POLYEST 0.1U K 63V
	403 237 8007	MT-COMPO 0.1U J 50V
C127	403 069 0507	CERAMIC 1000P K 50V
C128	403 050 0509	ELECT 2.2U M 50V
C129	403 028 2009	CERAMIC 56P J 50V
C130	403 069 8305	CERAMIC 0.01U Z 50V
C131	403 248 1608	ELECT 47U M 16V
C132	403 270 2901	MT-POLYEST 0.1U K 63V
	403 237 8007	MT-COMPO 0.1U J 50V
C133	403 024 9705	CERAMIC 4P C 50V
C135	403 270 2901	MT-POLYEST 0.1U K 63V
	403 237 8007	MT-COMPO 0.1U J 50V
C136	403 194 4609	ELECT 470U M 16V
C137	403 270 2901	MT-POLYEST 0.1U K 63V
	403 237 8007	MT-COMPO 0.1U J 50V
C160	403 056 9704	POLYESTER 0.01U J 50V
	403 178 9309	POLYESTER 0.01U J 50V
C170	403 069 8305	CERAMIC 0.01U Z 50V
C171	403 073 6403	CERAMIC 470P K 50V
C172	403 073 6403	CERAMIC 470P K 50V
C173	403 270 3601	MT-POLYEST 0.33U K 63V
	403 260 2904	MT-COMPO 0.33U J 50V
C174	403 270 3601	MT-POLYEST 0.33U K 63V
	403 260 2904	MT-COMPO 0.33U J 50V
C175	403 258 3609	ELECT 33U M 25V
C176	403 258 3609	ELECT 33U M 25V
C177	403 270 3403	MT-POLYEST 0.22U K 63V
	403 237 7901	MT-COMPO 0.22U J 50V
C178	403 270 3403	MT-POLYEST 0.22U K 63V
	403 237 7901	MT-COMPO 0.22U J 50V
C179	403 196 0203	ELECT 2200U M 35V
C180	403 270 3403	MT-POLYEST 0.22U K 63V
	403 237 7901	MT-COMPO 0.22U J 50V
C181	403 270 3403	MT-POLYEST 0.22U K 63V
	403 237 7901	MT-COMPO 0.22U J 50V
C182	403 196 0203	ELECT 2200U M 35V
C183	403 196 0203	ELECT 2200U M 35V
C184	403 069 8305	CERAMIC 0.01U Z 50V
C185	403 069 8305	CERAMIC 0.01U Z 50V
C186	403 069 8305	CERAMIC 0.01U Z 50V
C187	403 069 8305	CERAMIC 0.01U Z 50V
C188	403 248 2001	ELECT 4.7U M 25V
C189	403 248 1608	ELECT 47U M 16V
C191	403 258 3401	ELECT 10U M 25V
C192	403 258 3401	ELECT 10U M 25V
C193	403 244 1206	ELECT 100U M 10V
C202	403 270 2901	MT-POLYEST 0.1U K 63V
	403 237 8007	MT-COMPO 0.1U J 50V
C203	403 061 8303	POLYESTER 4700P K 50V
	403 179 1104	POLYESTER 4700P K 50V
C204	403 270 2901	MT-POLYEST 0.1U K 63V
	403 237 8007	MT-COMPO 0.1U J 50V
C205	403 270 2901	MT-POLYEST 0.1U K 63V
	403 237 8007	MT-COMPO 0.1U J 50V
C206	403 270 3809	MT-POLYEST 0.047U K 63V
	403 225 2703	MT-COMPO 0.047U J 50V
C207	403 248 2803	ELECT 2.2U M 50V
C208	403 270 2901	MT-POLYEST 0.1U K 63V
	403 237 8007	MT-COMPO 0.1U J 50V
C209	403 270 2901	MT-POLYEST 0.1U K 63V
	403 237 8007	MT-COMPO 0.1U J 50V
C210	403 270 2901	MT-POLYEST 0.1U K 63V
	403 237 8007	MT-COMPO 0.1U J 50V
C211	403 248 2803	ELECT 2.2U M 50V
C212	403 248 2803	ELECT 2.2U M 50V
C213	403 057 0601	POLYESTER 0.01U K 50V
	403 179 3801	POLYESTER 0.01U K 50V
C215	403 270 3908	MT-POLYEST 0.47U K 63V
	403 256 0808	MT-COMPO 0.47U J 50V
C216	403 270 2901	MT-POLYEST 0.1U K 63V
	403 237 8007	MT-COMPO 0.1U J 50V
C220	403 069 8305	CERAMIC 0.01U Z 50V
C221	403 270 2901	MT-POLYEST 0.1U K 63V
	403 237 8007	MT-COMPO 0.1U J 50V
C231	403 194 2100	NP-ELECT 4.7U M 100V
C232	403 138 1602	ELECT 1U M 100V
C233	403 075 8009	CERAMIC 0.01U K 500V
C270	403 059 6205	POLYESTER 0.022U K 50V
	403 179 2408	POLYESTER 0.022U K 50V
C271	403 069 0507	CERAMIC 1000P K 50V
C272	403 069 0507	CERAMIC 1000P K 50V
C275	403 248 1905	ELECT 10U M 16V
⚠C301	404 047 3602	MT-POLYEST 0.1U M 125V
	404 044 0901	MT-COMPO 0.1U M 250V
⚠C302	404 047 3602	MT-POLYEST 0.1U M 125V
	404 044 0901	MT-COMPO 0.1U M 250V
C303	403 076 7100	CERAMIC 1000P M 1K
C304	403 076 7100	CERAMIC 1000P M 1K
C305	403 076 7100	CERAMIC 1000P M 1K
C306	403 076 7100	CERAMIC 1000P M 1K
C307	404 047 1608	ELECT 270U M 400V
C314	403 270 2901	MT-POLYEST 0.1U K 63V
	403 237 8007	MT-COMPO 0.1U J 50V
C315	403 058 2604	POLYESTER 0.015U J 50V
	403 179 3207	POLYESTER 0.015U J 50V
C316	403 165 8407	CERAMIC 680P K 2K
	403 186 1104	CERAMIC 680P K 2K
C317	403 059 6205	POLYESTER 0.022U K 50V
	403 179 2408	POLYESTER 0.022U K 50V
⚠C331	404 060 6505	CERAMIC 2200P M 400V
	404 060 6604	CERAMIC 2200P M 400V
C351	403 165 9305	CERAMIC 680P K 1K
	403 185 9101	CERAMIC 680P K 1K
C352	403 165 8605	CERAMIC 470P K 2K
	403 232 1805	CERAMIC 470P K 2K
C354	403 186 3108	CERAMIC 390P K 1K
C361	404 055 9801	ELECT 220U M 200V
C362	403 281 1108	ELECT 22U M 250V

MC-Service

Ref. No.	Part No.	Description		
C363	403 210 5504	ELECT	470U M	35V
C364	403 148 0404	ELECT	1000U M	25V
C365	403 158 1309	ELECT	2200U M	35V
C371	403 194 4609	ELECT	470U M	16V
C372	403 194 4609	ELECT	470U M	16V
C382	403 210 5504	ELECT	470U M	35V
C383	403 160 0000	ELECT	470U M	10V
C400	403 014 0200	CERAMIC	18P J	50V
C401	403 270 2901	MT-POLYEST	0.1U K	63V
	403 237 8007	MT-COMPO	0.1U J	50V
C402	403 270 3809	MT-POLYEST	0.047U K	63V
	403 225 2703	MT-COMPO	0.047U J	50V
C403	403 061 8303	POLYESTER	4700P K	50V
	403 179 1104	POLYESTER	4700P K	50V
C404	403 086 2300	NP-ELECT	1U M	50V
C405	403 060 0704	POLYESTER	2700P K	50V
	403 179 2200	POLYESTER	2700P K	50V
C406	403 059 6205	POLYESTER	0.022U K	50V
	403 179 2408	POLYESTER	0.022U K	50V
C407	403 233 0302	ELECT	100U M	16V
⚠C420	404 060 7809	MT-POLYPRO	6000P J	1.5K
	404 060 7908	MT-POLYPRO	6000P J	1.5K
C421	403 218 3106	ELECT	1000U M	16V
C422	403 082 6906	POLYPRO	0.12U J	200V
⚠C423	404 040 8109	MT-POLYPRO	5600P J	1.5K
	404 040 7805	MT-POLYPRO	5600P J	1.5K
C424	403 083 4901	POLYPRO	0.027U J	400V
C425	403 083 4307	POLYPRO	0.022U J	400V
C426	403 066 6106	MT-POLYEST	0.47U J	250V
C430	403 075 7101	CERAMIC	1000P K	500V
C431	403 270 4004	MT-POLYEST	0.056U K	63V
	403 260 3109	MT-COMPO	0.056U J	50V
C432	403 075 7101	CERAMIC	1000P K	500V
C433	403 076 3102	CERAMIC	3900P K	500V
C434	403 229 1207	ELECT	47U M	35V
⚠C441	403 082 8009	POLYPRO	0.2U J	200V
⚠C442	403 082 6906	POLYPRO	0.12U J	200V
C443	403 201 5001	ELECT	330U M	16V
C444	403 259 8801	ELECT	0.47U M	160V
C451	403 148 2002	ELECT	470U M	35V
C452	403 217 1103	ELECT	220U M	35V
C453	403 023 9706	CERAMIC	39P J	50V
C454	403 069 8305	CERAMIC	0.01U Z	50V
C455	403 075 7101	CERAMIC	1000P K	500V
C456	403 233 0807	ELECT	10U M	50V
C458	403 233 0807	ELECT	10U M	50V
C459	403 065 9801	MT-POLYEST	0.22U K	100V
C461	403 155 1203	ELECT	3300U M	25V
C462	403 049 0008	ELECT	1U M	50V
C463	403 102 8408	MT-POLYEST	0.1U K	100V
C464	403 257 0807	ELECT	0.47U M	50V
C465	403 066 0104	MT-POLYEST	2.2U K	100V
C466	403 270 2901	MT-POLYEST	0.1U K	63V
	403 237 8007	MT-COMPO	0.1U J	50V
C467	403 241 3807	ELECT	220U M	10V
C468	403 258 3500	ELECT	22U M	25V
C469	403 233 0807	ELECT	10U M	50V
C470	403 069 8305	CERAMIC	0.01U Z	50V
C700	403 068 9006	CERAMIC	100P K	50V
C701	403 248 2001	ELECT	4.7U M	25V
C704	403 068 9006	CERAMIC	100P K	50V
C705	403 068 9006	CERAMIC	100P K	50V
C706	403 068 9006	CERAMIC	100P K	50V
C707	403 270 3403	MT-POLYEST	0.22U K	63V
	403 237 7901	MT-COMPO	0.22U J	50V
C708	403 270 3403	MT-POLYEST	0.22U K	63V
	403 237 7901	MT-COMPO	0.22U J	50V
C710	403 068 9006	CERAMIC	100P K	50V
C711	403 248 2001	ELECT	4.7U M	25V
C712	403 248 1400	ELECT	1U M	50V
C713	403 248 1400	ELECT	1U M	50V
C716	403 233 1507	ELECT	4.7U M	50V

Ref. No.	Part No.	Description		
C717	403 068 9006	CERAMIC	100P K	50V
C718	403 069 8305	CERAMIC	0.01U Z	50V
C719	403 069 0507	CERAMIC	1000P K	50V
C721	403 270 2901	MT-POLYEST	0.1U K	63V
	403 237 8007	MT-COMPO	0.1U J	50V
C722	403 248 1608	ELECT	47U M	16V
C723	403 026 0700	CERAMIC	47P J	50V
C724	403 026 0700	CERAMIC	47P J	50V
C727	403 270 2901	MT-POLYEST	0.1U K	63V
	403 237 8007	MT-COMPO	0.1U J	50V
C729	403 248 1905	ELECT	10U M	16V
C744	403 068 9006	CERAMIC	100P K	50V
C801	403 068 9006	CERAMIC	100P K	50V
C802	403 248 1905	ELECT	10U M	16V
C804	403 068 9006	CERAMIC	100P K	50V
C805	403 248 1905	ELECT	10U M	16V
C806	403 248 1905	ELECT	10U M	16V
C808	403 068 9006	CERAMIC	100P K	50V
C810	403 068 9006	CERAMIC	100P K	50V
C811	403 248 1905	ELECT	10U M	16V
C813	403 068 9006	CERAMIC	100P K	50V
C814	403 248 1905	ELECT	10U M	16V
C816	403 068 9006	CERAMIC	100P K	50V
C817	403 270 3908	MT-POLYEST	0.47U K	63V
	403 256 0808	MT-COMPO	0.47U J	50V
C818	403 248 1905	ELECT	10U M	16V
C819	403 248 1905	ELECT	10U M	16V
C820	403 248 1905	ELECT	10U M	16V
C821	403 258 3401	ELECT	10U M	25V
C822	403 044 7309	ELECT	10U M	25V
RESISTOR				
R102	401 026 9303	CARBON	47 JA	1/6W
R103	401 012 4503	CARBON	100 JA	1/4W
R104	401 027 2600	CARBON	5.6K JA	1/6W
R105	401 024 7004	CARBON	1K JA	1/6W
R106	401 025 7409	CARBON	220 JA	1/6W
R107	401 026 0409	CARBON	27 JA	1/6W
R108	401 026 3905	CARBON	330 JA	1/6W
R121	401 027 0309	CARBON	47K JA	1/6W
R122	401 025 8703	CARBON	220K JA	1/6W
R123	401 025 8703	CARBON	220K JA	1/6W
R124	401 027 5502	CARBON	6.8K JA	1/6W
R126	401 027 2600	CARBON	5.6K JA	1/6W
R127	401 024 6700	CARBON	100 JA	1/6W
R131	401 022 3107	CARBON	6.8K JA	1/4W
R132	401 020 2904	CARBON	47K JA	1/4W
R133	401 025 3807	CARBON	180 JA	1/6W
R134	401 012 5708	CARBON	1K JA	1/4W
R135	401 027 2303	CARBON	560 JA	1/6W
R136	401 027 0309	CARBON	47K JA	1/6W
R138	401 025 1308	CARBON	150 JA	1/6W
R160	401 027 0309	CARBON	47K JA	1/6W
R161	401 026 1000	CARBON	2.7K JA	1/6W
R162	401 026 4605	CARBON	33K JA	1/6W
R163	401 026 9907	CARBON	4.7K JA	1/6W
R171	401 019 9600	CARBON	47 JA	1/4W
R172	401 010 1504	CARBON	4.7 JA	1/2W
R173	401 014 4105	CARBON	1.5K JA	1/4W
R174	401 010 1504	CARBON	4.7 JA	1/2W
R175	401 019 9600	CARBON	47 JA	1/4W
R176	401 014 4105	CARBON	1.5K JA	1/4W
R177	401 024 9701	CARBON	12K JA	1/6W
R178	401 025 7805	CARBON	2.2K JA	1/6W
R179	401 024 9701	CARBON	12K JA	1/6W
R180	401 026 7408	CARBON	39K JA	1/6W
R181	401 026 7408	CARBON	39K JA	1/6W
R182	401 024 7400	CARBON	10K JA	1/6W
R185	401 007 7601	CARBON	150 JA	1/2W
R186	401 007 7601	CARBON	150 JA	1/2W
R189	401 024 7400	CARBON	10K JA	1/6W
R190	401 066 9004	OXIDE-MT	27 JA	2W

Ref. No.	Part No.	Description			Ref. No.	Part No.	Description		
R191	401 025 8208	CARBON	22K JA	1/6W	R448	401 065 2808	OXIDE-MT	120 JA	2W
R202	401 024 7707	CARBON	100K JA	1/6W	R449	401 059 1602	OXIDE-MT	15 JA	1W
R203	401 012 4503	CARBON	100 JA	1/4W	R450	401 027 3003	CARBON	56K JA	1/6W
R204	401 012 4503	CARBON	100 JA	1/4W	R451	401 026 8108	CARBON	4.7 JA	1/6W
R205	401 012 4503	CARBON	100 JA	1/4W	R452	401 026 7002	CARBON	3.9K JA	1/6W
R206	401 024 6700	CARBON	100 JA	1/6W	R453	401 016 3809	CARBON	2.2K JA	1/4W
R207	401 024 6700	CARBON	100 JA	1/6W	R454	401 027 8107	CARBON	82 JA	1/6W
R208	401 024 6700	CARBON	100 JA	1/6W	R455	401 025 1605	CARBON	1.5K JA	1/6W
R209	401 022 3107	CARBON	6.8K JA	1/4W	R456	401 020 2003	CARBON	4.7K JA	1/4W
R210	401 025 1902	CARBON	15K JA	1/6W	R457	401 025 1605	CARBON	1.5K JA	1/6W
R212	401 025 4200	CARBON	1.8K JA	1/6W	R458	401 059 2708	OXIDE-MT	150 JA	1W
R213	401 016 4806	CARBON	22K JA	1/4W	R459	401 057 7408	OXIDE-MT	0.82 JA	1W
R215	401 025 4200	CARBON	1.8K JA	1/6W	R460	401 010 7605	CARBON	560 JA	1/2W
R216	401 012 7009	CARBON	10K JA	1/4W	R461	401 058 3607	OXIDE-MT	1K JA	1W
R219	401 019 1000	CARBON	390 JA	1/4W	R462	401 014 4105	CARBON	1.5K JA	1/4W
R220	401 027 5007	CARBON	68 JA	1/6W	R463	401 025 4200	CARBON	1.8K JA	1/6W
R221	401 024 6700	CARBON	100 JA	1/6W	R467	401 027 3201	CARBON	560K JA	1/6W
R231	401 014 6109	CARBON	150K JA	1/4W	R468	401 025 4200	CARBON	1.8K JA	1/6W
R232	401 012 5708	CARBON	1K JA	1/4W	R469	401 027 5908	CARBON	68K JA	1/6W
R233	401 000 7509	SOLID	1.5K KA	1/2W	R471	401 025 1605	CARBON	1.5K JA	1/6W
R234	401 024 7400	CARBON	10K JA	1/6W	R472	401 027 0309	CARBON	47K JA	1/6W
R235	401 026 7408	CARBON	39K JA	1/6W	R473	401 022 1905	CARBON	680 JA	1/4W
R275	401 025 7409	CARBON	220 JA	1/6W	R474	401 009 0907	CARBON	270 JA	1/2W
⚠R301	401 008 8607	CARBON	220K JA	1/2W	R475	401 009 5803	CARBON	330 JA	1/2W
R302	402 067 7709	WIRE WOUND	3.9 KA	7W	R476	401 025 7805	CARBON	2.2K JA	1/6W
R311	401 027 2600	CARBON	5.6K JA	1/6W	R477	401 021 3009	CARBON	5.6K JA	1/4W
R315	401 025 8208	CARBON	22K JA	1/6W	R479	401 016 3809	CARBON	2.2K JA	1/4W
R317	401 024 7004	CARBON	1K JA	1/6W	R480	401 027 0309	CARBON	47K JA	1/6W
R319	401 016 1508	CARBON	22 JA	1/4W	R481	401 064 5206	OXIDE-MT	1.5 JA	2W
R320	401 007 5805	CARBON	120K JA	1/2W	R700	401 024 7400	CARBON	10K JA	1/6W
R321	401 007 5805	CARBON	120K JA	1/2W	R701	401 024 7400	CARBON	10K JA	1/6W
R322	401 014 5201	CARBON	15K JA	1/4W	R702	401 026 4308	CARBON	3.3K JA	1/6W
R323	401 026 1000	CARBON	2.7K JA	1/6W	R704	401 026 7002	CARBON	3.9K JA	1/6W
R324	401 068 2607	OXIDE-MT	47 JA	2W	R705	401 026 4308	CARBON	3.3K JA	1/6W
R325	401 067 8204	OXIDE-MT	39 JA	2W	R706	401 012 7009	CARBON	10K JA	1/4W
R326	401 017 1507	CARBON	2.7K GA	1/4W	R707	401 012 5708	CARBON	1K JA	1/4W
⚠R331	402 000 8305	SOLID	5.6M KA	1/2W	R708	401 012 5708	CARBON	1K JA	1/4W
⚠R332	402 000 8305	SOLID	5.6M KA	1/2W	R710	401 024 7400	CARBON	10K JA	1/6W
R352	401 014 6109	CARBON	150K JA	1/4W	R711	401 012 7009	CARBON	10K JA	1/4W
R353	401 027 4307	CARBON	6.2K JA	1/6W	R712	401 025 7805	CARBON	2.2K JA	1/6W
R354	401 015 4708	CARBON	180K JA	1/4W	R713	401 024 7400	CARBON	10K JA	1/6W
R355	401 011 2708	CARBON	68K JA	1/2W	R714	401 026 1307	CARBON	27K JA	1/6W
R356	401 025 8208	CARBON	22K JA	1/6W	R715	401 025 8208	CARBON	22K JA	1/6W
R362	402 067 8904	WIRE WOUND	3.9 KA	5W	R716	401 027 0309	CARBON	47K JA	1/6W
R363	401 065 5809	OXIDE-MT	15 JA	2W	R717	401 024 9305	CARBON	1.2K JA	1/6W
R364	401 069 0404	OXIDE-MT	6.8 JA	2W	R718	401 026 7002	CARBON	3.9K JA	1/6W
R368	401 066 9004	OXIDE-MT	27 JA	2W	R719	401 012 7009	CARBON	10K JA	1/4W
R382	401 026 4308	CARBON	3.3K JA	1/6W	R721	401 026 4605	CARBON	33K JA	1/6W
R385	401 025 7409	CARBON	220 JA	1/6W	R723	401 024 7004	CARBON	1K JA	1/6W
R393	401 024 9701	CARBON	12K JA	1/6W	R724	401 024 7400	CARBON	10K JA	1/6W
R394	401 026 7606	CARBON	390K JA	1/6W	R726	401 024 7400	CARBON	10K JA	1/6W
R400	401 027 0309	CARBON	47K JA	1/6W	R727	401 024 7707	CARBON	100K JA	1/6W
R401	401 024 6700	CARBON	100 JA	1/6W	R731	401 026 6609	CARBON	390 JA	1/6W
R402	401 027 6103	CARBON	680K JA	1/6W	R732	401 024 7400	CARBON	10K JA	1/6W
R403	401 012 4503	CARBON	100 JA	1/4W	R733	401 025 4200	CARBON	1.8K JA	1/6W
R404	401 025 8208	CARBON	22K JA	1/6W	R734	401 026 9907	CARBON	4.7K JA	1/6W
R405	401 024 6700	CARBON	100 JA	1/6W	R735	401 027 8602	CARBON	8.2K JA	1/6W
R406	401 026 7606	CARBON	390K JA	1/6W	R736	401 025 1605	CARBON	1.5K JA	1/6W
R407	401 025 8208	CARBON	22K JA	1/6W	R737	401 014 4105	CARBON	1.5K JA	1/4W
R408	401 012 4503	CARBON	100 JA	1/4W	R738	401 026 6609	CARBON	390 JA	1/6W
R409	401 026 9907	CARBON	4.7K JA	1/6W	R743	401 025 1308	CARBON	150 JA	1/6W
R410	401 025 8208	CARBON	22K JA	1/6W	R744	401 026 7002	CARBON	3.9K JA	1/6W
R420	401 024 7400	CARBON	10K JA	1/6W	R745	401 025 1308	CARBON	150 JA	1/6W
R422A	402 067 8805	WIRE WOUND	10 KA	5W	R746	401 026 7002	CARBON	3.9K JA	1/6W
R432	401 024 7004	CARBON	1K JA	1/6W	R758	401 027 2600	CARBON	5.6K JA	1/6W
R433	401 007 1104	CARBON	1K JA	1/2W	R759	401 025 7805	CARBON	2.2K JA	1/6W
R434	401 067 9003	OXIDE-MT	390 JA	2W	R761	401 068 4601	OXIDE-MT	4.7K JA	2W
R436	401 014 5201	CARBON	15K JA	1/4W	R762	401 024 7400	CARBON	10K JA	1/6W
R441	401 058 3706	OXIDE-MT	1K JA	1W	R763	401 025 1902	CARBON	15K JA	1/6W
R444	401 024 6700	CARBON	100 JA	1/6W	R764	401 025 4903	CARBON	180K JA	1/6W
R445	401 024 7707	CARBON	100K JA	1/6W	R767	401 024 6700	CARBON	100 JA	1/6W
R446	401 015 4708	CARBON	180K JA	1/4W	R775	401 012 7009	CARBON	10K JA	1/4W

Ref. No.	Part No.	Description
R776	401 024 7707	CARBON 100K JA 1/6W
R781	401 026 9907	CARBON 4.7K JA 1/6W
R782	401 025 8208	CARBON 22K JA 1/6W
R791	401 069 3603	OXIDE-MT 6.8K JA 2W
R792	401 014 5201	CARBON 15K JA 1/4W
R793	401 012 7009	CARBON 10K JA 1/4W
R794	401 012 7009	CARBON 10K JA 1/4W
R796	401 013 5301	CARBON 1.2K JA 1/4W
R800	401 027 2303	CARBON 560 JA 1/6W
R801	401 024 7707	CARBON 100K JA 1/6W
R803	401 024 7707	CARBON 100K JA 1/6W
R804	401 025 7805	CARBON 2.2K JA 1/6W
R805	401 027 5502	CARBON 6.8K JA 1/6W
R806	401 027 8602	CARBON 8.2K JA 1/6W
R807	401 024 7707	CARBON 100K JA 1/6W
R808	401 025 7805	CARBON 2.2K JA 1/6W
R809	401 027 2303	CARBON 560 JA 1/6W
R810	401 024 7707	CARBON 100K JA 1/6W
R812	401 025 4606	CARBON 18K JA 1/6W
R814	401 022 3107	CARBON 6.8K JA 1/4W
R815	401 014 5201	CARBON 15K JA 1/4W
R816	401 024 7400	CARBON 10K JA 1/6W
R817	401 025 7805	CARBON 2.2K JA 1/6W
R818	401 027 6608	CARBON 75 JA 1/6W
R819	401 025 8208	CARBON 22K JA 1/6W
R820	401 026 1000	CARBON 2.7K JA 1/6W
R822	401 025 4606	CARBON 18K JA 1/6W
R823	401 027 5502	CARBON 6.8K JA 1/6W
R824	401 026 9907	CARBON 4.7K JA 1/6W
R825	401 021 3009	CARBON 5.6K JA 1/4W
R826	401 024 7400	CARBON 10K JA 1/6W
R827	401 027 6608	CARBON 75 JA 1/6W
R828	401 026 9907	CARBON 4.7K JA 1/6W
R829	401 026 9600	CARBON 470 JA 1/6W
R830	401 012 7009	CARBON 10K JA 1/4W
R831	401 027 6608	CARBON 75 JA 1/6W
R832	401 027 6608	CARBON 75 JA 1/6W
R835	401 025 8208	CARBON 22K JA 1/6W
R837	401 027 6608	CARBON 75 JA 1/6W
R845	401 012 5708	CARBON 1K JA 1/4W
R846	401 024 9305	CARBON 1.2K JA 1/6W
R847	401 025 7805	CARBON 2.2K JA 1/6W
R848	401 024 7707	CARBON 100K JA 1/6W
R849	401 026 4308	CARBON 3.3K JA 1/6W
R851	401 024 7707	CARBON 100K JA 1/6W
R852	401 027 6608	CARBON 75 JA 1/6W
R853	401 024 6700	CARBON 100 JA 1/6W
R854	401 024 9305	CARBON 1.2K JA 1/6W
R856	401 024 7400	CARBON 10K JA 1/6W
R857	401 012 7009	CARBON 10K JA 1/4W
R858	401 026 9600	CARBON 470 JA 1/6W
R860	401 024 7004	CARBON 1K JA 1/6W
R861	401 027 9005	CARBON 82K JA 1/6W
R862	401 027 9005	CARBON 82K JA 1/6W
R863	401 027 9005	CARBON 82K JA 1/6W
R864	401 023 3700	CARBON 82K JA 1/4W
R866	401 027 5502	CARBON 6.8K JA 1/6W
R867	401 027 8602	CARBON 8.2K JA 1/6W
VARIABLE RESISTOR		
VR120	610 237 8726	VR B-10K
	610 239 7550	VR B-10K
VR351	610 237 8702	VR B-2.2K
	610 239 7574	VR B-2K
VR401	610 237 8726	VR B-10K
	610 239 7550	VR B-10K
VR451	610 230 8013	VR B-100
	610 232 7892	VR B-100
VR462	610 230 7320	VR B-4.7K
	610 232 8448	VR B-5K
TRANSFORMER		
T102	610 037 7103	S TRANS
T121	610 037 4522	S COIL
⚠T311	645 003 2998	TRANS,POWER,PULSE
⚠T381	610 033 3758	POWER TRANS
	610 240 4722	POWER TRANS
T431	610 000 1077	DRIVE TRANS
⚠T471	645 003 3094	TRANS,FLYBACK
COIL		
L103	645 003 9713	INDUCTOR,15U K
L125	645 008 2924	INDUCTOR,8.2U K
L171	645 008 5635	INDUCTOR,12U K
L172	645 008 5635	INDUCTOR,12U K
L201	645 008 2863	INDUCTOR,4.7U K
L202	645 008 2863	INDUCTOR,4.7U K
L203	645 008 2863	INDUCTOR,4.7U K
⚠L301A	610 221 6912	LINE FILTER
L420	610 031 1039	INDUCTOR
L425	645 003 9782	INDUCTOR,22U K
L431	645 008 5628	INDUCTOR,1U M
L441C	610 000 0858	LINEARITY COIL
	610 000 0872	LINEARITY COIL
L442	610 000 0070	COIL
L451	610 210 3908	PEAKING COIL 33UHK
	645 001 5748	INDUCTOR,33U K
L452	610 032 1243	INDUCTOR,150U K
	610 032 1250	INDUCTOR,150U
L461	610 031 1367	INDUCTOR 202J
L462	610 000 0261	COIL
	610 208 3781	COIL
L702	645 008 2894	INDUCTOR,5.6U K
L703	645 008 2894	INDUCTOR,5.6U K
L704	645 003 9782	INDUCTOR,22U K
L705	645 001 4697	INDUCTOR,1.5U M
L706	645 001 4567	INDUCTOR,10U K
L800	645 001 4567	INDUCTOR,10U K
L801	645 001 4567	INDUCTOR,10U K
L803	645 001 4567	INDUCTOR,10U K
L804	645 001 4567	INDUCTOR,10U K
DIODE		
D130	407 075 9905	ZENER DIODE EQA03-11A
	407 063 8309	ZENER DIODE MTZJ11C
D189	407 012 4406	DIODE 1SS133
	407 012 5809	DIODE 1SS176
D190	407 148 0105	ZENER DIODE EQA02-05A
	407 148 0204	ZENER DIODE EQA02-05B
	407 053 5806	ZENER DIODE MTZ4.7B
	407 053 5905	ZENER DIODE MTZ4.7C
D191	408 007 8607	DIODE 1N4148
	407 013 1206	DIODE 1S1555
D201	407 075 9905	ZENER DIODE EQA03-11A
	407 063 8309	ZENER DIODE MTZJ11C
D202	407 075 9905	ZENER DIODE EQA03-11A
	407 063 8309	ZENER DIODE MTZJ11C
D203	407 075 9905	ZENER DIODE EQA03-11A
	407 063 8309	ZENER DIODE MTZJ11C
D210	407 012 4406	DIODE 1SS133
	407 012 5809	DIODE 1SS176
D231	407 005 4505	DIODE DS442X
	407 013 1008	DIODE 1S1553
	407 013 4306	DIODE 1S2076A
	407 013 6508	DIODE 1S2471
D232	408 007 8607	DIODE 1N4148
	407 013 1206	DIODE 1S1555
D275	407 048 1202	ZENER DIODE EQA02-05E
	407 053 6407	ZENER DIODE MTZ5.1C
D302	407 005 7308	DIODE EM01Z
D303	407 006 6300	DIODE ERC05-10B
	407 009 6901	DIODE RM11C
D304	407 006 6300	DIODE ERC05-10B
	407 009 6901	DIODE RM11C
D305	407 006 6300	DIODE ERC05-10B

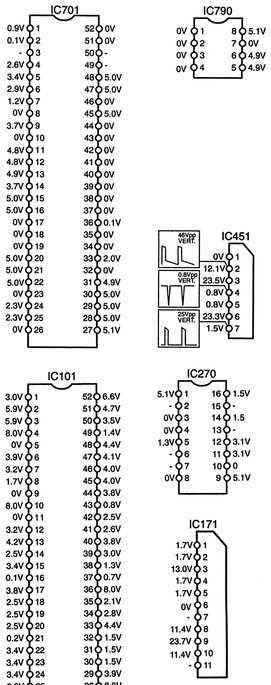
Ref. No.	Part No.	Description
	407 009 6901	DIODE RM11C
D306	407 006 6300	DIODE ERC05-10B
	407 009 6901	DIODE RM11C
D314	407 005 4505	DIODE DS442X
	407 013 1008	DIODE 1S1553
	407 013 4306	DIODE 1S2076A
	407 013 6508	DIODE 1S2471
⚠D315	407 105 8700	PHOTO COUPLE PC113B
	408 009 8407	PHOTO COUPLE CNY17F-3OPT6
D316	407 005 4505	DIODE DS442X
	407 013 1008	DIODE 1S1553
	407 013 4306	DIODE 1S2076A
	407 013 6508	DIODE 1S2471
D317	407 007 6606	DIODE ES1
	407 007 6903	DIODE ES1Z
	408 009 9008	DIODE BYD33D
D318	407 005 4505	DIODE DS442X
	407 013 1008	DIODE 1S1553
	407 013 4306	DIODE 1S2076A
	407 013 6508	DIODE 1S2471
D319	407 048 3206	ZENER DIODE EQA02-07A
	407 048 3404	ZENER DIODE EQA02-07B
	407 053 7602	ZENER DIODE MTZ6.8B
	407 053 7701	ZENER DIODE MTZ6.8C
D351	407 007 7702	DIODE EU2A
D352	407 007 7504	DIODE EU1C
D353	407 007 7603	DIODE EU2
	407 007 7801	DIODE EU2Z
D354	407 106 2806	DIODE RU3YX
D355	407 103 1604	DIODE RU4YX LF-J3
D361	407 048 2407	ZENER DIODE EQA02-06E
	407 048 2605	ZENER DIODE EQA02-06F
	407 053 7206	ZENER DIODE MTZ6.2C
	407 053 7503	ZENER DIODE MTZ6.8A
D381	407 048 2001	ZENER DIODE EQA02-06B
	407 053 6803	ZENER DIODE MTZ5.6C
D384	407 005 4505	DIODE DS442X
	407 013 1008	DIODE 1S1553
	407 013 4306	DIODE 1S2076A
	407 013 6508	DIODE 1S2471
D391	408 007 8607	DIODE 1N4148
	407 013 1206	DIODE 1S1555
D392	407 012 4406	DIODE 1SS133
	407 012 5809	DIODE 1SS176
D393	407 012 4406	DIODE 1SS133
	407 012 5809	DIODE 1SS176
D401	407 075 9905	ZENER DIODE EQA03-11A
	407 063 8309	ZENER DIODE MTZJ11C
D431	407 048 4906	ZENER DIODE EQA02-09A
	407 048 5101	ZENER DIODE EQA02-09B
	407 053 8708	ZENER DIODE MTZ9.1A
	407 053 8807	ZENER DIODE MTZ9.1B
D432	407 007 6606	DIODE ES1
D433	407 012 4406	DIODE 1SS133
	407 012 5809	DIODE 1SS176
D434	407 005 7308	DIODE EM01Z
D438	407 095 8001	DIODE ERD07-15L
D439	407 006 4108	DIODE ERB44-04
D440	407 012 4406	DIODE 1SS133
	407 012 5809	DIODE 1SS176
D441	407 012 4406	DIODE 1SS133
	407 012 5809	DIODE 1SS176
D442	407 012 4406	DIODE 1SS133
	407 012 5809	DIODE 1SS176
D443	407 012 4406	DIODE 1SS133
	407 012 5809	DIODE 1SS176
D446	407 012 4406	DIODE 1SS133
	407 012 5809	DIODE 1SS176
D451	407 005 7308	DIODE EM01Z
	408 009 9008	DIODE BYD33D
D452	408 007 8607	DIODE 1N4148
	407 013 1206	DIODE 1S1555

Ref. No.	Part No.	Description
D465	407 012 4406	DIODE 1SS133
	407 012 5809	DIODE 1SS176
D466	407 048 9000	ZENER DIODE EQA02-18A
	407 077 9705	ZENER DIODE MTZ20A
D467	407 005 4505	DIODE DS442X
	407 013 1008	DIODE 1S1553
	407 013 4306	DIODE 1S2076A
	407 013 6508	DIODE 1S2471
D468	407 012 4406	DIODE 1SS133
	407 012 5809	DIODE 1SS176
D469	407 007 7405	DIODE EU1
D471	407 118 2207	ZENER DIODE 1Z75
D701	407 120 9706	LED LN28RPL
D701A	610 248 0528	HOLDER LED-E6YC
D702	407 012 4406	DIODE 1SS133
	407 012 5809	DIODE 1SS176
D703	407 055 7907	ZENER DIODE RD3.6EL
D704	409 013 0104	IC HZT33
D705	407 075 9905	ZENER DIODE EQA03-11A
	407 063 8309	ZENER DIODE MTZJ11C
D800	407 075 9905	ZENER DIODE EQA03-11A
	407 063 8309	ZENER DIODE MTZJ11C
D801	407 075 9905	ZENER DIODE EQA03-11A
	407 063 8309	ZENER DIODE MTZJ11C
D802	407 075 9905	ZENER DIODE EQA03-11A
	407 063 8309	ZENER DIODE MTZJ11C
D803	407 075 9905	ZENER DIODE EQA03-11A
	407 063 8309	ZENER DIODE MTZJ11C
D804	407 075 9905	ZENER DIODE EQA03-11A
	407 063 8309	ZENER DIODE MTZJ11C
D805	407 075 9905	ZENER DIODE EQA03-11A
	407 063 8309	ZENER DIODE MTZJ11C
D807	407 075 9905	ZENER DIODE EQA03-11A
	407 063 8309	ZENER DIODE MTZJ11C
D808	407 075 9905	ZENER DIODE EQA03-11A
	407 063 8309	ZENER DIODE MTZJ11C
D809	407 075 9905	ZENER DIODE EQA03-11A
	407 063 8309	ZENER DIODE MTZJ11C
D810	407 012 4406	DIODE 1SS133
	407 012 5809	DIODE 1SS176
D811	407 075 9905	ZENER DIODE EQA03-11A
	407 063 8309	ZENER DIODE MTZJ11C
D812	407 075 9905	ZENER DIODE EQA03-11A
	407 063 8309	ZENER DIODE MTZJ11C
D813	407 075 9905	ZENER DIODE EQA03-11A
	407 063 8309	ZENER DIODE MTZJ11C
D814	407 075 9905	ZENER DIODE EQA03-11A
	407 063 8309	ZENER DIODE MTZJ11C
D816	407 075 9905	ZENER DIODE EQA03-11A
	407 063 8309	ZENER DIODE MTZJ11C
MISCELLANEOUS		
⚠F301	423 022 2102	FUSE 250V 4A
A101	645 009 5993	TUNER,U
A701	645 007 1546	UNIT,REMOCON RECEIVER
	610 224 5806	RC PREAMP 409-1L
K171	645 006 4708	JACK,PHONE D3.6
K801	610 234 3779	SOCKET 21P
K802	645 000 1000	TERMINAL,BOARD
⚠PS301	408 013 3801	TH PTH451C262BF140M270
SW220	610 011 2728	SWITCH,LEVER 1P-3T
⚠SW301	645 003 6811	SWITCH,PUSH POWER 2P-2T
SW451	610 011 2728	SWITCH,LEVER 1P-3T
SW701	610 011 4432	SWITCH,PUSH
SW702	610 011 4432	SWITCH,PUSH
SW703	610 011 4432	SWITCH,PUSH
SW704	610 011 4432	SWITCH,PUSH
SW705	610 011 4432	SWITCH,PUSH
SW706	610 011 4432	SWITCH,PUSH
X101	421 002 4702	SAW F TSF5322
X124	610 015 2885	TRAP,CERAMIC 6.0MHZ
X400	610 249 5577	CRYSTAL OSCILLATOR

MC-Service

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
X701	645 000 6692	OSC,CERAMIC 8.00MHZ			
	645 002 1039	OSC,CERAMIC 8.00MHZ			

MAIN PCB UNIT



Q312	VOLT.	WAVEFORM
B	-1.4V	6.6Vp-p
C	-1.1V	5.0Vp-p
E	0V	

Q313	VOLT.	WAVEFORM
B	-1.1V	5.0Vp-p
C	-	660Vp-p
E	0V	

Q431	VOLT.	WAVEFORM
B	0.2V	1.0Vp-p HORIZ.
C	11.2V	60Vp-p HORIZ.
E	0V	

Q432	VOLT.	WAVEFORM
B	0.1V	12Vp-p HORIZ.
C	-	1100Vp-p HORIZ.
E	0V	

CRT UNIT

Q601	VOLT.	WAVEFORM
B	2.0V	2.8Vp-p HORIZ.
C	143V	91Vp-p HORIZ.
E	1.5V	

Q611	VOLT.	WAVEFORM
B	2.2V	3.4Vp-p HORIZ.
C	144V	100Vp-p HORIZ.
E	1.8V	

Q621	VOLT.	WAVEFORM
B	2.1V	3.2Vp-p HORIZ.
C	145V	94Vp-p HORIZ.
E	1.7V	

Q640	VOLT.
B	0.9V
C	0V
E	1.5V

IC191	VOLT.
1	9.6V
2	0V
3	5.0V

IC351	VOLT.
1	14.5V
2	0V
3	11.7V

IC352	VOLT.
1	10.7V
2	0V
3	8.0V

Q101	VOLT.
B	1.2V
C	5.3V
E	0.5V

Q102	VOLT.
B	5.2V
C	9.1V
E	4.7V

Q122	VOLT.
B	3.1V
C	8.1V
E	2.4V

Q124	VOLT.
B	2.4V
C	0V
E	3.1V

Q160	VOLT.
B	0.4V
C	5.4V
E	0V

Q171	VOLT.
B	0V
C	12.9V
E	0V

Q700	VOLT.
B	8.0V
C	0V
E	5.0V

Q702	VOLT.
B	0.6V
C	0V
E	0V

Q703	VOLT.
B	0.6V
C	0.1V
E	0V

Q704	VOLT.
B	0.1V
C	29.0V
E	1.6V

Q708	VOLT.
B	4.4V
C	5.0V
E	5.1V

Q711	VOLT.
B	0.5V
C	5.3V
E	0V

Q714	VOLT.
B	0V
C	5.1V
E	0.1V

Q721	VOLT.
B	0V
C	5.1V
E	0.3V

Q722	VOLT.
B	0V
C	5.1V
E	0V

Q202	VOLT.
B	0.6V
C	0.1V
E	0V

Q203	VOLT.
B	0V
C	0V
E	0V

Q311	VOLT.
B	9.5V
C	-1.4V
E	9.9V

Q353	VOLT.
B	6.8V
C	29.0V
E	6.2V

Q381	VOLT.
B	5.7V
C	15.7V
E	5.1V

Q434	VOLT.
B	0V
C	4.9V
E	0V

Q443	VOLT.
B	7.7V
C	0.7V
E	7.8V

Q461	VOLT.
B	0.5V
C	9.1V
E	0V

Q462	VOLT.
B	9.7V
C	0V
E	9.1V

Q781	VOLT.
B	3.3V
C	8.0V
E	2.8V

Q800	VOLT.
B	0.1V
C	0V
E	0V

Q801	VOLT.
B	0.9V
C	11.7V
E	0.3V

Q802	VOLT.
B	0V
C	5.1V
E	0V

Q803	VOLT.
B	0V
C	0V
E	0.6V

Q804	VOLT.
B	0.6V
C	11.7V
E	0.1V

Q805	VOLT.
B	0V
C	0.6V
E	0V

Q806	VOLT.
B	6.4V
C	11.7V
E	5.7V

Q808	VOLT.
B	7.1V
C	11.7V
E	6.6V

Q809	VOLT.
B	7.1V
C	11.7V
E	6.6V

Q810	VOLT.
B	3.9V
C	11.7V
E	3.2V

The service Precaution:
The area enclosed by this line ( ) is directly connected with AC mains voltage. When servicing the area, connect an isolating transformer between TV receiver and AC line to eliminate hazard of electric shock.

SANYO

COLOUR TELEVISION

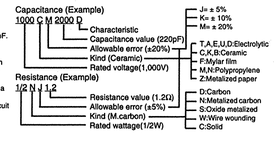
EB2-A CHASSIS SERIES

SERVICE REF.NO. C25EG85NB-00

Part No. SKP20053 E6YRV

Product safety notice:
Product safety should be considered when a component replacement is made in any area of a receiver. Components indicated by a mark ⚠ in this circuit diagram show components whose values have special significance to product safety. It is particularly recommended that only parts specified on the part service manual be used for components replacement pointed out by the mark.

Circuit diagram notes :
1. All resistance values are in ohms, K=1,000, M=1,000,000.
2. All resistance rated wattages are 1/6W unless otherwise noted.
3. Excepting electrolytic capacitors, all capacitance values of less than 1 are expressed in μF and more than 1 are pF.
4. All capacitance rated voltages are 50V unless otherwise noted.
5. All inductance values are in μH.
6. Voltage readings taken with tables with a "VTVM" are from point indicated chassis ground. Voltage readings taken by using a colour bar signal are with all controls at normal and AFC switch in "OFF" position.Some voltages may vary with signal strength.
7. Waveforms were taken with colour bar and controls adjusted for normal picture. Waveforms were taken by using a wide band oscilloscope and a low capacity probe.
8. This circuit diagram covers a basic or representative chassis only. There may be some components or partial circuit differences between the actual chassis and the circuit diagram.
9. Expression of capacitance and resistance in circuit diagram.

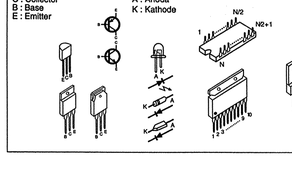


10. ■ Diode 1S1555 may be replaced with 1S2473, 1S2076 or DS472 unless otherwise noted.
■Transistor 2SC536(E,F,G),may be replaced with 2SC1740S(Q,R,S), 2SC1740(Q,R,S), 2SC945A(Q,R,P) or 2SC1815(G,O,Y) unless otherwise noted.
■ Transistor 2SA508(E,F) may be replaced with 2SA933(Q,R), 2SA564(QA,RA), or 2SA1015(O,Y) unless otherwise noted.

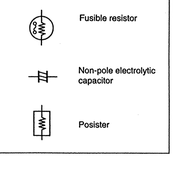
Transistor, Diode & Integrated Circuit terminal guide

C : Collector
B : Base
E : Emitter

A : Anoda
K : Kathode

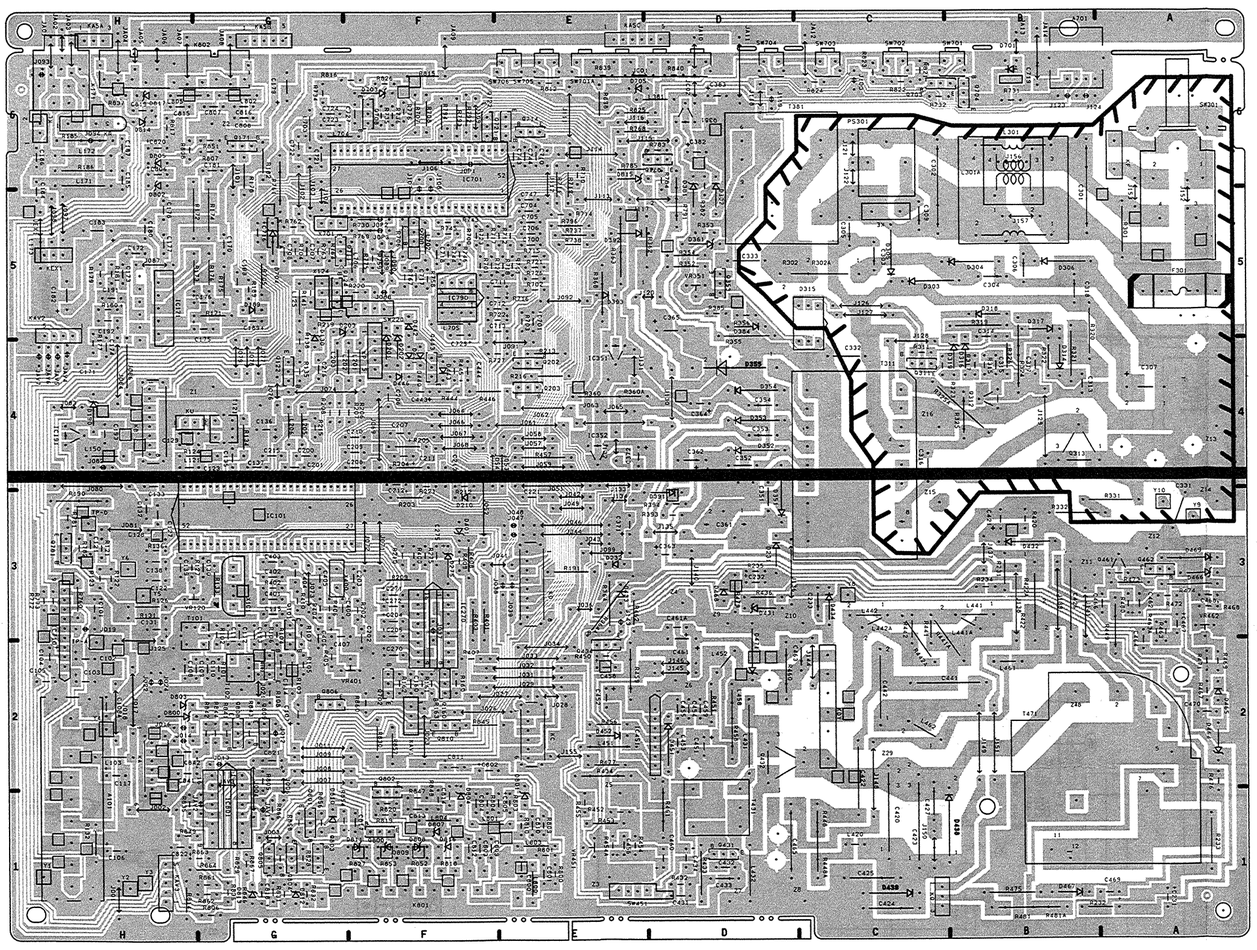


Particular parts symbol

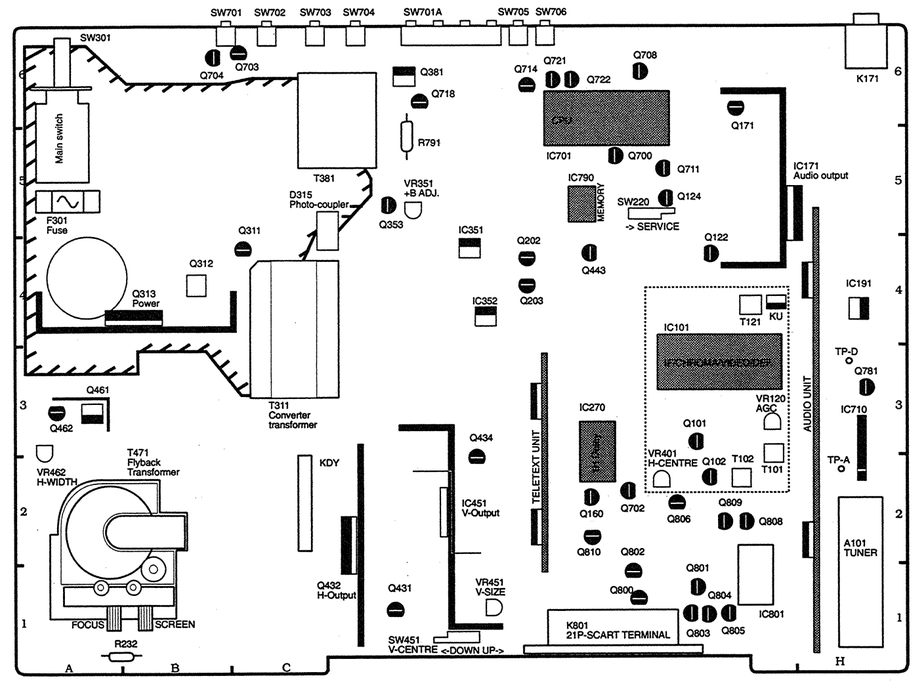


MC-Service

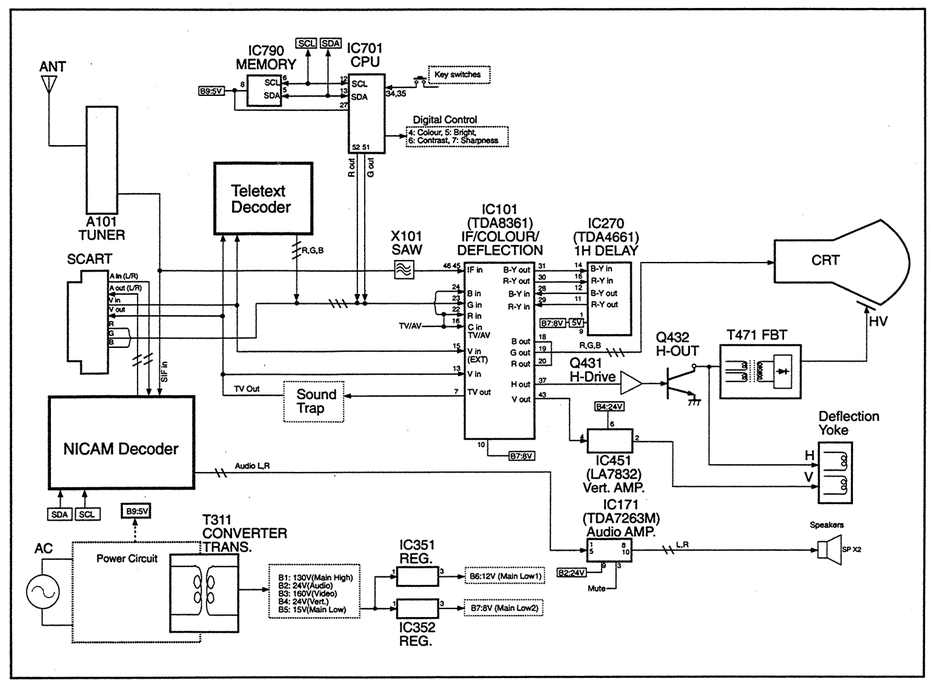
MAIN BOARD (CIRCUIT SIDE)



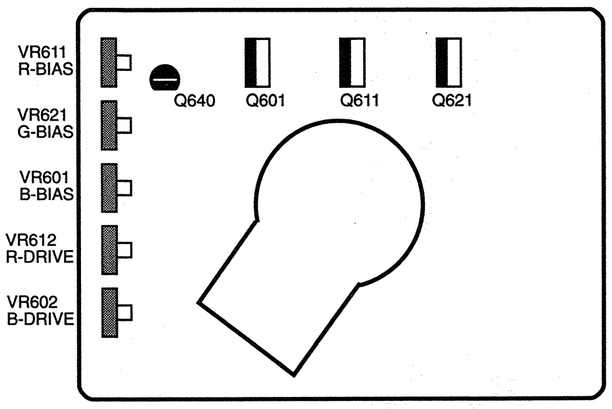
MAIN BOARD (COMPONENT LOCATION)



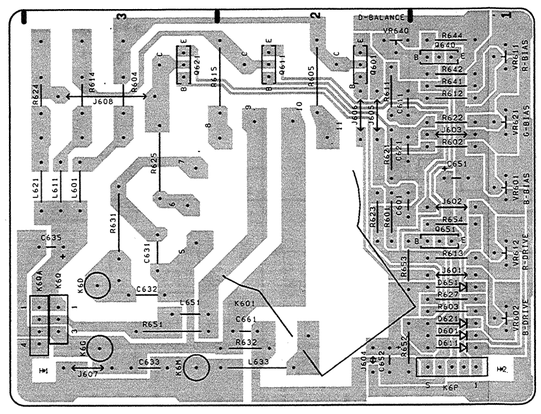
GENERAL BLOCK DIAGRAM OF EB2 CHASSIS



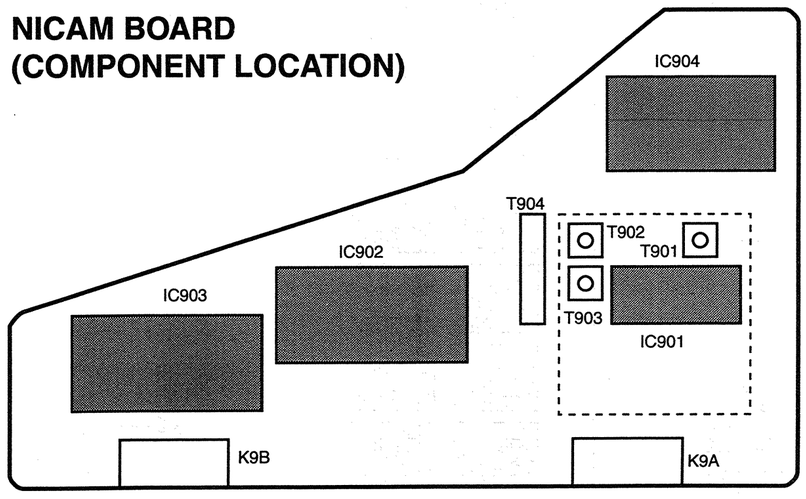
CRT BOARD (COMPONENT LOCATION)



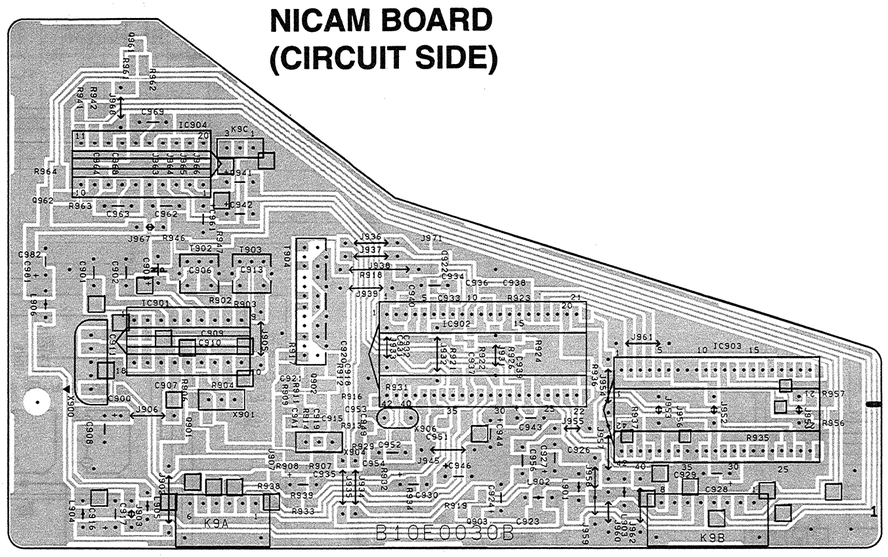
CRT BOARD (CIRCUIT SIDE)



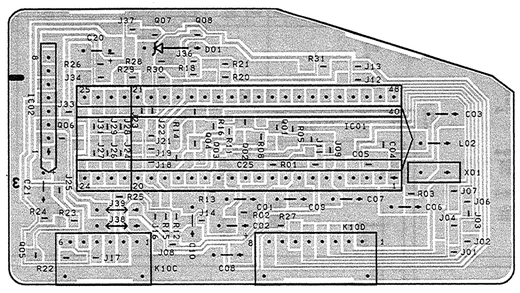
NICAM BOARD (COMPONENT LOCATION)



NICAM BOARD (CIRCUIT SIDE)



TELETEXT BOARD (CIRCUIT SIDE)



AUDIO UNIT (NICAM)

IC901

4.4V	1	20	4.4V
2.1V	2	19	4.4V
5.6V	3	18	0V
0V	4	17	11.7V
3.0V	5	16	5.7V
2.4V	6	15	5.7V
3.1V	7	14	2.1V
3.1V	8	13	2.1V
5.3V	9	12	5.3V
5.3V	10	11	5.3V

IC902

0V	1	42	4.7V
0.1V	2	41	3.0V
0.1V	3	40	2.7V
2.5V	4	39	11.6V
2.5V	5	38	2.5V
0V	6	37	2.5V
2.7V	7	36	2.5V
10.8V	8	35	2.9V
11.6V	9	34	2.5V
4.9V	10	33	2.5V
2.5V	11	32	5.0V
1.3V	12	31	4.9V
0V	13	30	2.5V
2.4V	14	29	2.5V
0V	15	28	4.8V
4.9V	16	27	4.9V
0V	17	26	0V
2.5V	18	25	0.3V
2.5V	19	24	2.2V
2.3V	20	23	0V
2.4V	21	22	2.5V

IC903

0V	1	42	2.4V
2.5V	2	41	0V
2.5V	3	40	2.5V
0V	4	39	0V
4.9V	5	38	0V
0V	6	37	0V
4.9V	7	36	2.3V
4.9V	8	35	0V
4.9V	9	34	0V
0V	10	33	0V
0V	11	32	4.9V
4.8V	12	31	0V
4.9V	13	30	0V
4.9V	14	29	0V
2.3V	15	28	2.4V
2.5V	16	27	2.4V
4.9V	17	26	2.1V
4.9V	18	25	4.9V
4.9V	19	24	0V
4.9V	20	23	0V
4.9V	21	22	0V

IC904

5.8V	1	28	3.4V
11.6V	2	27	3.4V
5.8V	3	26	3.4V
11.6V	4	25	3.4V
3.4V	5	24	5.8V
5.8V	6	23	5.8V
5.8V	7	22	5.8V
5.8V	8	21	5.8V
5.8V	9	20	4.9V
0V	10	19	5.0V
5.8V	11	18	5.8V
5.8V	12	17	5.8V
5.8V	13	16	4.9V
0V	14	15	5.0V

Q2901	VOLT.
B	5.7V
C	11.6V
E	5.1V

Q2902	VOLT.
B	1.5V
C	3.3V
E	1.0V

Q2903	VOLT.
B	5.6V
C	4.9V
E	4.9V

Q2962	VOLT.
B	5.8V
C	11.6V
E	5.2V

Q2961	VOLT.
B	5.8V
C	11.6V
E	5.2V

TELETEXT UNIT

IC1001

4.7V	1	40	-
2.0V	2	39	4.5V
3.6V	3	38	-
0V	4	37	-
0V	5	36	-
0V	6	35	-
4.9V	7	34	-
2.2V	8	33	-
2.5V	9	32	-
4.9V	10	31	-
0V	11	30	-
2.2V	12	29	-
4.6V	13	28	-
0V	14	27	-
0V	15	26	-
0V	16	25	4.0V
0V	17	24	4.0V
0V	18	23	0V
0V	19	22	0V
0V	20	21	4.7V

Q1001	VOLT.
B	0V
C	4.9V
E	0V

Q1002	VOLT.
B	0V
C	4.9V
E	0V

Q1003	VOLT.
B	0V
C	4.9V
E	0V

Q1004	VOLT.
B	0V
C	4.9V
E	0V

Q1005	VOLT.
B	3.9V
C	11.7V
E	3.2V

Q1006	VOLT.
B	5.7V
C	11.7V
E	5.1V

Q1007	VOLT.
B	0V
C	12.0V
E	0V

IC1002

11.6V	1	8	
7.6V	2	7	
3.6V	3	6	
6.9V	4	5	
0V	5	4	
0V	6	3	
7.6V	7	2	
0V	8	1	

MC-Service